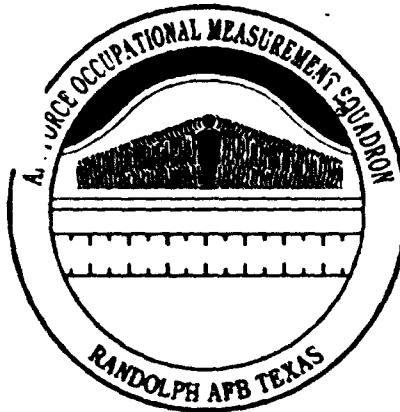




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UNITED STATES
AIR FORCE

OCCUPATIONAL SURVEY REPORT

94-26116



PRINTING MANAGEMENT CAREER LADDER

AFSC 3R0X1

AFPT 90-703-006

JUNE 1994

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OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION and TRAINING COMMAND
1550 5th STREET EAST
RANDOLPH AFB, TEXAS 78150-4449

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PREFACE

This report presents the results of an Air Force Occupational Survey of the Printing Management career ladder (AFSC 3R0X1). Authority for conducting occupational surveys is contained in AFI 36-2623. Computer products used in this report are available for use by operations and training officials.

First Lieutenant Shannon Karpel, Inventory Development Specialist, developed the survey instrument. Second Lieutenant Trevor D. Staiger, Occupational Analyst, analyzed the data and wrote the final report. Mr. Wayne Fruge provided computer programming support, and Ms. Tamme Lambert provided administrative support. Major Randall C. Agee, Chief, Airman Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS), reviewed and approved this report for release.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies are available upon request to the AFOMS, Attention: Chief, Occupational Analysis Flight (OMY), 1550 5th Street East, Randolph AFB TX 78150-4449 (DSN 487-6623).

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SUMMARY OF RESULTS

1. Survey Coverage: The Printing Management (AFSC 3R0X1) career ladder was surveyed to obtain data needed to update AFMAN 36-2108, Specialty Training Standards (STSs), Career Development Courses (CDCs), Specialty Knowledge Tests (SKTs), and the training courses. Survey results are based on 253 responses from AFSC 3R0X1 personnel, which constitute 67 percent of the assigned population.
2. Specialty Jobs: Structure analysis identified one cluster and eight independent jobs: Duplication cluster, Offset Duplicator job, Small Printing Press Operator job, Printing Plant Bindery job, Duplication Center High Speed Copier Operator job, Printing Plant Press job, Lithograph Operator job, Copier Management job, and Micrograph Operator job. Clusters and independent jobs are discussed within this report.
3. Career Ladder Progression: Personnel in the Printing Management career ladder show a typical pattern of career ladder progression. Three-skill level personnel perform essentially technical tasks. At the 5-skill level, a moderate shift towards supervisory functions occurs, with members still spending more than 75 percent of their job time performing technical duties. Seven-skill level personnel spend over half of their duty time performing managerial and supervisory functions, with less dedicated to technical duties. Specialty descriptions in AFMAN 36-2108 provide a broad and accurate overview of tasks and duties performed within the career ladder.
4. Job Satisfaction Analysis: No serious job satisfaction problems appear to exist within this specialty. Overall, job satisfaction responses were slightly lower than those of a comparative sample of similar Air Force personnel surveyed in 1992.
5. Implications: The AFSC 3R0X1 career ladder structure identified in this report is similar to that found in the 1988 OSR. The AFMAN 36-2108 Specialty Descriptions accurately describe the jobs and tasks performed by personnel at all skill levels, and overall satisfaction was positive for the jobs identified.

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**OCCUPATIONAL SURVEY REPORT (OSR)
PRINTING MANAGEMENT CAREER LADDER
(AFSC 3R0X1)**

INTRODUCTION

This is a report of an occupational survey of the Printing Management career ladder conducted by the Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS). This survey was conducted in order to update the career ladder training programs as part of a 5-year cycle. The last survey pertaining to this career ladder was published in February 1988 (AFSC 703X0).

Background

As described in the AFMAN 36-2108 Specialty Descriptions for DAFSC 3R031/51/71, 3- and 5-skill level members operate offset presses, micrographic reproduction, computer output microform equipment, manual and power binding, and related equipment. They also prepare dummy layouts, film negatives, lithographic plates, and electrostatic masters for copy reproduction by offset process. In addition, 7-skill members manage the copy management program.

Initial 3-skill level training for AFSC 3R0X1 personnel is provided through an 18-week course taught at the Defense Mapping School at Ft Belvoir VA. The Apprentice Printing Management course, E5ABD3R031-000, provides a working knowledge of copy cameras, using filters when appropriate. Training also covers producing line and halftone negatives, utilizing tray and automatic film processing methods, preparing simple and combination flats utilizing layout dummies, and producing offset plates. Students obtain apprentice-level technical skills and knowledge necessary to operate steam-fed offset presses up to 30 inches, photodirect platemakers, and offset duplicators. They also learn to perform operator maintenance on all equipment used. Students receive a working knowledge of various items of bindery equipment. Air Force students receive additional training in micrographics not provided to the Army and Navy students in this Joint Service course.

Entry into the career ladder currently requires an Armed Forces Vocational Aptitude Battery (ASVAB) General score of 30 and a strength factor of G (40 lbs)

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SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) Air Force Personnel Test (AFPT) 90-703-006, dated January 1993. A tentative task list was prepared after reviewing pertinent career ladder publications and directives, and tasks from the last AFSC 703X0 OSR. The preliminary task list was refined and validated through personal interviews with 16 subject-matter experts (SMEs) representing major commands (MAJCOMs) at the following locations:

<u>BASE</u>	<u>UNIT AND REASON FOR VISIT</u>
Ft Belvoir VA	Defense Mapping School
Bolling AFB DC	SAF/AAIPR (Air Staff)
Andrews AFB MD	89 MSSQ (Defense Printing Service interaction)
Langley AFB VA	HQ ACC (Command Functional Manager location)
March AFB CA	22 MSSQ

The resulting JI contained a comprehensive listing of 480 tasks grouped under 15 duty headings. A background section requested information such as grade, job title, time in present job, time in service, job satisfaction, facility assigned to, job title, and a list of equipment utilized in the performance of the incumbent's job.

Survey Administration

From December through April 1993, Military Personnel Flights at operational bases nationwide administered the inventory to eligible AFSC 3R0X1 personnel. Members eligible for the survey consisted of the total assigned 3-, 5-, and 7-skill level population, excluding the following: (1) hospitalized personnel; (2) personnel in transition for a permanent change of station; (3) personnel retiring during the time inventories were administered to the field; and (4) personnel in their jobs less than 6 weeks. Participants were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Military Personnel Center (AFMPC).

Each individual who completed the inventory first filled in an identification and biographical information section and then checked each task performed in their current job. After checking all tasks performed, each individual rated each task on a 9-point scale showing relative time spent on that task as compared to all other tasks checked. The ratings ranged from 1 (very small amount time spent) through 5 (about average time spent) to 9 (very large amount spent).

To determine relative time spent for each task checked by a respondent, all of the incumbent's ratings are assumed to account for 100 percent of that member's time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100 to provide a relative percentage of time for each task. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percentage of time spent.

Survey Sample

Personnel were selected to participate in this survey to ensure an accurate representation across MAJCOMs and paygrades. Table 1 reflects the distribution percentages, by MAJCOM, of assigned AFSC 3R0X1 personnel, as of June 1993. The 253 respondents in the final sample represent 67 percent of all assigned AFSC 3R0X1 personnel. Table 2 reflects the distribution percentages by paygrade groups. Respondents within the survey are distributed proportionately across MAJCOMs and paygrades and are very representative of the assigned population, as can be seen in Figure 1.

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected senior AFSC 3R0X1 personnel (generally E-6 or E-7 technicians) also completed a second booklet for either training emphasis (TE) or task difficulty (TD). These booklets were processed separately from JIs. This information is used in a number of different analyses discussed in more detail within this report.

Training Emphasis (TE)

TE is defined as the amount of structured training first-enlistment personnel need to perform tasks successfully. Structured training is defined as training provided by resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal, or any other organized training method. Thirty-seven experienced AFSC 3R0X1 NCOs rated the tasks

TABLE I
MAJCOM REPRESENTATION IN SAMPLE

<u>COMMAND</u>	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
ACC	38	36
USAFE	18	19
AMC	14	12
AF ELM EUR	8	5
PACAF	7	8
AFIC	5	3
AETC	3	8
AFMC	2	2
AFOSI	1	1
AFSOC	1	1
AFSPCOM	1	2
AFTAC	1	1
AF DIST WA	1	2

TOTAL ASSIGNED = 380

TOTAL SURVEYED = 333

TOTAL IN SAMPLE = 253

PERCENT OF ASSIGNED IN SAMPLE = 67%

PERCENT OF SURVEYED IN SAMPLE = 76%

TABLE 2
PAYGRADE DISTRIBUTION OF SAMPLE

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
E-1 to E-3	18	18
E-4	31	32
E-5	23	22
E-6	15	15
E-7	11	11
E-8	2	2

MAJCOM DISTRIBUTION

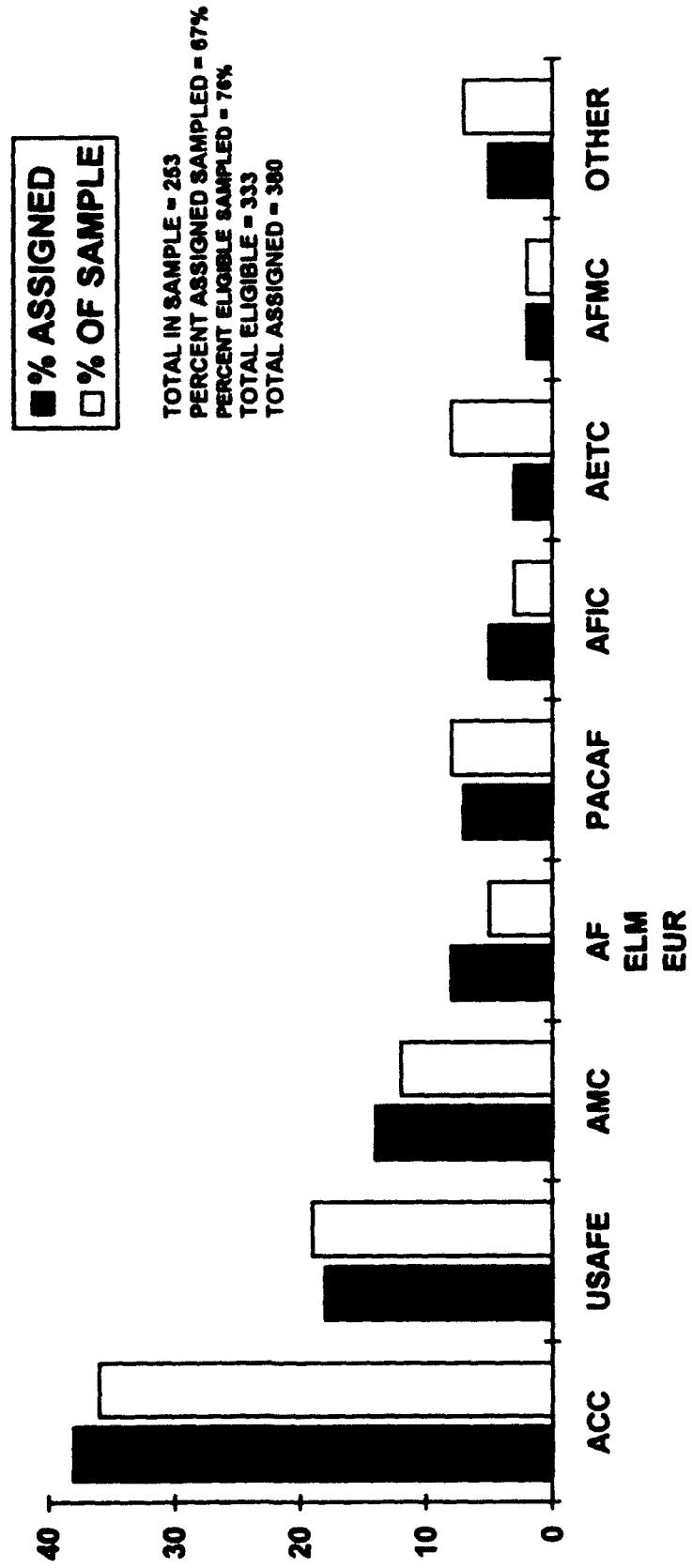


FIGURE 1

in the inventory on a 10-point scale ranging from 0 (no training required) to 9 (extremely high amount of training required). The interrater agreement for these raters was acceptable. The average TE rating for AFSC 3R0X1 was 3.08, with a standard deviation of 1.58. Any task with a TE rating of 4.66 or greater for AFSC 3R0X1 tasks is considered to have a high TE.

When used in conjunction with the primary criterion of percent members performing, TD and TE ratings can provide insight into first-term personnel training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting AFS entry level jobs.

Task Difficulty (TD)

TD is defined as an estimate of the length of time the average airman takes to learn how to perform a task. Thirty-five experienced AFSC 3R0X1 noncommissioned officers (NCOs) rated the difficulty of the inventory tasks on a 9-point scale ranging from 1 (easy to learn) to 9 (very difficult to learn). Interrater agreement was again acceptable. TD ratings are normally adjusted so tasks of average difficulty have a value of 5.0, with a standard deviation of 1.0. Thus, any task with a TD rating of 6.00 or above is considered difficult to learn.

SPECIALTY JOBS **(Career Ladder Structure)**

The first step in the analysis process is to identify the structure of the career ladder in terms of the jobs performed by the respondents. Comprehensive Occupational Data Analysis Programs (CODAP) assist by creating an individual job description for each respondent based on the tasks performed and relative amount of time spent on the tasks. The CODAP automated job clustering program compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and combines them to form a composite job description. In successive stages, new members are added to this initial group, or new groups are formed based on the similarity of tasks and time spent ratings.

The basic group used in the hierarchical clustering process is the Job. When two or more jobs have a substantial degree of similarity in tasks performed and time spent on tasks, they are grouped together and identified as a Cluster. The structure of the career ladder is then defined in terms of jobs and clusters of jobs.

Overview of Specialty Jobs

Based on the analysis of tasks performed and the amount of time spent performing each task, one cluster and eight jobs were identified within the career ladder. Figure 2 illustrates the jobs performed by AFSC 3R0X1 personnel. A listing of these jobs is provided below. The stage (ST) number shown beside each title references computer-printed information; the letter ("N") stands for the number of personnel in each group.

- I. DUPLICATION CLUSTER (STG16, N=139)
- II. OFFSET DUPLICATOR (OD) JOB (STG37, N=60)
- III. SMALL PRINTING PRESS OPERATOR JOB (STG26, N=6)
- IV. PRINTING PLANT BINDERY JOB (STG30, N=5)
- V. DUPLICATION CENTER HIGH SPEED COPIER OPERATOR JOB (STG59, N=5)
- VI. PRINTING PLANT PRESS JOB (STG53, N=6)
- VII. LITHOGRAPH OPERATOR JOB (STG32, N=4)
- VIII. PRINTING PLANT COPIER MANAGEMENT JOB (STG23, N=9)
- IX. MICROGRAPH OPERATOR JOB (STG56, N=4)

The respondents forming these groups account for 94 percent of the survey sample. The remaining 6 percent were performing tasks or series of tasks which did not group with any of the defined jobs. Some of the job titles given by respondents which were representative of these personnel include: Customer Service, Chief Logistics Branch, Functional Analyst, and the Career Field Manager.

Job Descriptions

The following paragraphs contain brief descriptions of the one cluster and eight jobs identified through the career ladder structure analysis. Appendix A lists representative tasks performed by members with each job, while Tables 3 and 4 provide demographic information for each job discussed within this report.

Another way to illustrate these jobs is to summarize tasks performed into groups of tasks (task modules). This allows for a very concise display of where job incumbents spend most of their time and thus develops a comprehensive overview of each job. The display shows the

JOBs PERFORMED BY ALL AFSC 3R0X1 PERSONNEL

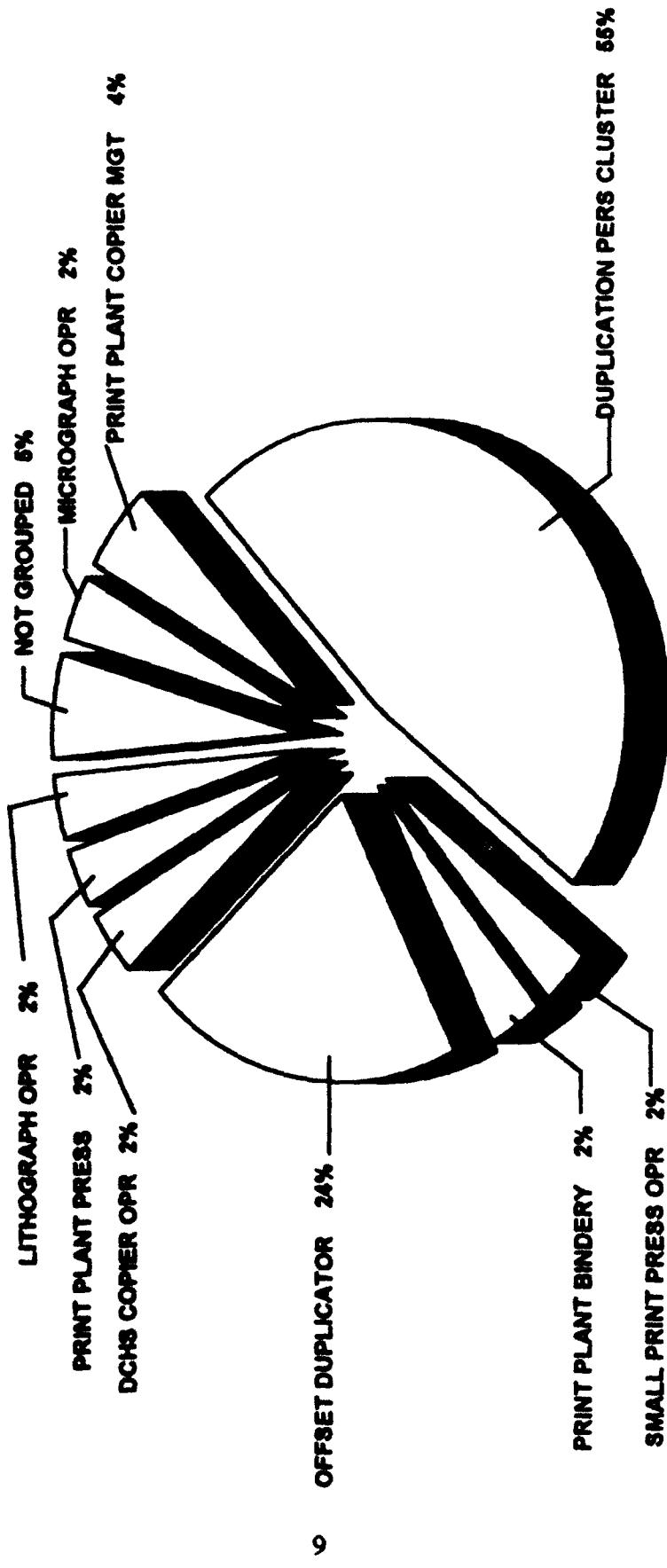


FIGURE 2

TABLE 1
AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER JOBS

DUTIES	DUPLICATION CLUSTER					
	D.C. PRODUCTION CONTROL JOB (STG35)	D.C. BINDER WORKER JOB (STG63)	D.C. NOIC JOB (STG63)	COPPER PROGRAM OPERATOR JOB (STG38)	REPRO MGMT JOB (STG62)	
A ORGANIZING AND PLANNING	12	5	5	16	9	22
B DIRECTING AND IMPLEMENTING	10	3	11	6	6	18
C EVALUATING AND INSPECTING	11	3	11	7	7	9
D TRAINING	1	*	2	1	1	7
E PERFORMING ADMINISTRATIVE, SUPPLY, PRODUCTION CONTROL, AND COMMERCIAL PRINTING PROCUREMENT ACTIVITIES	55	28	36	24	20	
F PERFORMING COPY MANAGEMENT ACTIVITIES	-	3	1	18	4	
G PERFORMING ELECTROSTATIC PLATEMAKING ACTIVITIES	1	*	1	1	1	
H PERFORMING LITHOGRAPHIC PLATEMAKING ACTIVITIES	-	-	-	*	-	
I OPERATING AND MAINTAINING ELECTROSTATIC DUPLICATORS (HIGH-SPEED COPIERS/DUPLICATORS)	1	30	14	19	14	
J OPERATING AND MAINTAINING OFFSET DUPLICATORS (ODs) OR SMALL PRESSES	4	2	-	5	-	
K OPERATING OR MAINTAINING LARGE PRINTING PRESSES	-	-	-	-	-	
L PERFORMING BINDER Y ACTIVITIES	-	1	26	8	9	5
M PERFORMING LITHOGRAPHIC CAMERA ACTIVITIES	2	-	-	-	-	
N PERFORMING LAYOUT OR STRIPPING ACTIVITIES	-	-	-	-	-	
O PERFORMING MICROGRAPHIC ACTIVITIES	-	-	-	-	-	

* Denotes less than 1 percent

- Denotes no response

TABLE 3 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER JOBS

DUTIES	DUPLICATION CLUSTER			PRINTING PLANT MANAGEMENT JOB (STG31)	OFFSET DUP (OD)	SMALL PRINT PRESS OPERATOR JOB (STG37)	PRINT PLANT BINDER JOB (STG30)
	BINDERY MANAGEMENT JOB (STG66)	COPIER MANAGEMENT JOB (STG66)	PRINTING PLANT MANAGEMENT JOB (STG32)				
A ORGANIZING AND PLANNING	10	20	30	5	•	3	3
B DIRECTING AND IMPLEMENTING	9	16	24	4	-	-	6
C EVALUATING AND INSPECTING	8	13	30	3	•	•	5
D TRAINING	2	8	7	2	2	2	2
E PERFORMING ADMINISTRATIVE, SUPPLY, PRODUCTION CONTROL, AND COMMERCIAL PRINTING PROCUREMENT ACTIVITIES	25	17	7	11	4	-	-
F PERFORMING COPY MANAGEMENT ACTIVITIES	11	10	2	2	-	-	-
G PERFORMING ELECTROSTATIC PLATEMAKING ACTIVITIES	•	-	-	5	1	-	-
H PERFORMING LITHOGRAPHIC PLATEMAKING ACTIVITIES	-	-	-	1	4	-	-
I OPERATING AND MAINTAINING ELECTROSTATIC DUPLICATORS (HIGH-SPEED COPIERS/DUPLICATORS)	21	7	-	14	13	5	5
J OPERATING AND MAINTAINING OFFSET DUPLICATORS(OD) OR SMALL PRESSES	•	2	-	31	65	-	-
K OPERATING OR MAINTAINING LARGE PRINTING PRESSES	-	-	-	3	-	-	-
L PERFORMING BINDERY ACTIVITIES	14	6	1	15	10	68	-
M PERFORMING LITHOGRAPHIC CAMERA ACTIVITIES	-	-	-	2	2	-	-
N PERFORMING LAYOUT OR STRIPPING ACTIVITIES	-	-	-	2	2	-	-
O PERFORMING MICROGRAPHIC ACTIVITIES	-	-	-	-	-	-	-

• Denotes less than 1 percent
- Denotes no response

TABLE 3 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER JOBS

DUTIES	D.C. HIGH SP. COPIER OPERATOR JOB (STG59)	PRINTING PLANT PRESS JOB (STG53)	LITHOGRAPH OPERATOR JOB (STG32)	COPIER MANAGEMENT JOB (STG23)	MICROGRAPH OPERATOR JOB (STG56)
A ORGANIZING AND PLANNING	-	2	6	21	2
B DIRECTING AND IMPLEMENTING	1	1	6	16	1
C EVALUATING AND INSPECTING	3	2	10	7	1
D TRAINING	-	2	9	1	-
E PERFORMING ADMINISTRATIVE, SUPPLY, PRODUCTION CONTROL, AND COMMERCIAL PRINTING PROCUREMENT ACTIVITIES	25	2	9	12	5
F PERFORMING COPY MANAGEMENT ACTIVITIES	-	-	*	40	-
G PERFORMING ELECTROSTATIC PLATEMAKING ACTIVITIES	2	3	-	-	-
H PERFORMING LITHOGRAPHIC PLATEMAKING ACTIVITIES	-	1	5	-	6
I OPERATING AND MAINTAINING ELECTROSTATIC DUPLICATORS (HIGH-SPEED COPIERS/DUPLICATORS)	56	*	-	-	-
J OPERATING AND MAINTAINING OFFSET DUPLICATORS (ODs) OR SMALL PRESSES	*	*	-	-	-
K OPERATING OR MAINTAINING LARGE PRINTING PRESSES	-	31	-	-	-
L PERFORMING BINDERY ACTIVITIES	12	13	-	2	2
M PERFORMING LITHOGRAPHIC CAMERA ACTIVITIES	-	-	36	-	-
N PERFORMING LAYOUT OR STRIPPING ACTIVITIES	-	-	9	-	-
O PERFORMING MICROGRAPHIC ACTIVITIES	-	-	-	85	-

* Denotes less than 1 percent

- Denotes no response

TABLE 4

SELECTED BACKGROUND DATA FOR 180X1 CAREER LADDER JOBS

		DUPLICATION CLUSTER				REPRO MONT JOB (STG62)			
		D.C. BINDER	D.C. NOIC	COPER PROGRAM OPERATOR	PROGRAM JOB (STG38)	D.C. NOIC JOB (STG63)	D.C. NOIC JOB (STGSS)	COPIER PROGRAM JOB (STG38)	REPRO MONT JOB (STG62)
NUMBER IN GROUP	PERCENT OF SAMPLE	4	24	7	18	3	1%	3	1%
		2%	9%	3%	7%	1%	1%	3	1%
DAFSC DISTRIBUTION									
3R031	0%	29%	0%	22%	0%	0%	0%	0%	0%
3R051	75%	67%	57%	56%	67%	67%	67%	67%	67%
3R071	25%	4%	43%	22%	33%	33%	33%	33%	33%
PAYGRADE DISTRIBUTION									
E-1 to E-3	25%	38%	0%	11%	11%	0%	0%	0%	0%
E-4	0%	54%	43%	39%	39%	67%	67%	67%	67%
E-5	75%	8%	29%	44%	44%	33%	33%	33%	33%
E-6	0%	0%	14%	6%	6%	0%	0%	0%	0%
E-7	0%	0%	14%	0%	0%	0%	0%	0%	0%
E-8	0%	0%	0%	0%	0%	0%	0%	0%	0%
AVERAGE NUMBER OF TASKS PERFORMED									
AVERAGE MONTHS TAFMS	56	56	68	62	45				
PERCENT IN FIRST ENLISTMENT	106	46	130	94	95				
PERCENT SUPERVISING	25%	71%	0%	28%	0%				
	50%	8%	86%	28%	67%				

TABLE 4 (CONTINUED)

SELECTED BACKGROUND DATA FOR 380X1 CAREER LADDER JOBS

		DUPLICATION CLUSTER			PRINTING			OFFSET			SMALL PRINT			PRINT PLANT BINDER Y JOB (STG30)		
		BINDER Y MANAGEMENT	COPIER JOB	MANAGEMENT JOB	PRINTING PLANT MANAGEMENT JOB	DUP (OD)	DU P JOB	STG31	STG37	STG26	STG31	STG37	STG26	STG31	STG37	STG26
NUMBER IN GROUP	PERCENT OF SAMPLE															
3R031	16	52	4	6%	0%	0%	0%	60	6	5	0%	33%	33%	0%	0%	0%
3R051	6%	21%	2%	6%	23%	50%	50%	71%	71%	67%	71%	67%	80%	80%	20%	20%
3R071	19%	77%	12%	19%	77%	50%	50%	12%	12%	0%	12%	12%	0%	0%	0%	0%
DAFSC DISTRIBUTION																
3R031	6%	0%	0%	0%	0%	0%	0%	17%	17%	17%	17%	17%	17%	0%	0%	0%
3R051	75%	23%	77%	75%	77%	50%	50%	71%	71%	67%	71%	67%	80%	80%	20%	20%
3R071	19%	77%	12%	19%	77%	50%	50%	12%	12%	0%	12%	12%	0%	0%	0%	0%
PAYGRADE DISTRIBUTION																
E-1 to E-3	12%	0%	0%	0%	0%	0%	0%	27%	27%	27%	27%	27%	27%	0%	0%	0%
E-4	38%	7%	7%	7%	0%	0%	0%	42%	42%	42%	42%	42%	42%	60%	60%	60%
E-5	38%	17%	17%	17%	0%	0%	0%	18%	18%	18%	18%	18%	18%	0%	0%	0%
E-6	12%	35%	35%	35%	25%	25%	25%	10%	10%	10%	10%	10%	10%	40%	40%	40%
E-7	0%	37%	37%	37%	25%	25%	25%	3%	3%	3%	3%	3%	3%	0%	0%	0%
E-8	0%	4%	4%	4%	50%	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AVERAGE NUMBER OF TASKS PERFORMED		102	137	63	63	263	263	131	131	131	35	35	35	38	38	38
AVERAGE MONTHS TAFMS		110	178	0%	0%	0%	0%	82	82	82	46	46	46	124	124	124
PERCENT IN FIRST ENLISTMENT		13%	0%	0%	0%	0%	0%	44%	44%	44%	50%	50%	50%	20%	20%	20%
PERCENT SUPERVISING		37%	88%	100%	100%	100%	100%	18%	18%	18%	0%	0%	0%	20%	20%	20%

TABLE 4 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER JOBS

	DC HIGH SP COPPER OPERATOR JOB (STG59)	PRINTING PLANT PRESS JOB (STG51)	LITHOGRAPH OPERATOR JOB (STG12)	COPIER MANAGEMENT JOB (STG23)	MICROGRAPH OPERATOR JOB (STG56)
NUMBER IN GROUP PERCENT OF SAMPLE	5 2%	6 2%	4 2%	9 4%	4 2%
<hr/>					
DAFSC DISTRIBUTION					
1R031	60%	33%	0%	0%	0%
1R051	40%	50%	50%	45%	100%
1R071	0%	17%	50%	55%	0%
<hr/>					
PAYGRADE DISTRIBUTION					
E-1 to E-3	80%	17%	0%	0%	0%
E-4	20%	50%	25%	22%	75%
E-5	0%	17%	25%	44%	25%
E-6	0%	16%	0%	22%	0%
E-7	0%	0%	25%	12%	0%
E-8	0%	0%	25%	0%	0%
<hr/>					
AVERAGE NUMBER OF TASKS PERFORMED	21	78	89	25	14
AVERAGE MONTHS TAFMS	30	101	183	137	88
PERCENT IN FIRST ENLISTMENT	80%	17%	25%	0%	25%
PERCENT SUPERVISING	20%	77%	50%	22%	0%

number of tasks included in a module, the average percent time spent on that module, a cumulative amount of time spent on the listed modules, and finally, an average percent members performing the particular task module. These modules were identified through CODAP co-performance clustering. Representative task modules are listed as a part of the job description and highlighted in Table 5. The list of modules with respective tasks is presented in Appendix B.

I. **DUPLICATION CLUSTER (STG16, N=139)**. This is the core work of the career ladder, performed by more than half of the respondents. Incumbents in the Duplication cluster perform an average of 93 tasks, which deal with performing routine tasks of placing service calls, maintaining job logs using Reprographics Automated Management System (RAMS), loading paper, and notifying customers of completed work. They spend more than half of their job time in three technical and two managerial-related duties: performing administrative functions, operating and maintaining electrostatic duplicators, bindery duties, organizing and planning, and directing and implementing. Representative tasks performed by members with these jobs include:

- place service calls
- maintain job logs in computer using RAMS
- load paper
- determine or establish work priorities
- notify customer of completed work
- review printing or duplication requests
- adjust copy quality displays to include document type, exposure, density, photo contrast, or special job requirements
- adjust reduction/shift displays to include preset reduction, variable reduction, or image shift
- add staples
- verify duplicating or printing requests

As the core job of this specialty, incumbents include a broad range of experience levels, from tech school graduate through moderately experienced technicians. The job is performed mostly by personnel in paygrades E-4 through E-7, holding the 5- and 7-skill level, and averaging slightly more than 10 years' time in service.

This cluster contains eight jobs, distinguished from each other by equipment used, the area where they work, and the tasks which are performed. The first four jobs are primarily technical, while the last four are supervisory.

The first job, Production Control, is highly involved with filing work requests, maintaining job logs in RAMS, notifying customers of completed work, and tracking daily production. The Duplication Center Bindery Worker job is much more involved with bindery duties, such as marrying sections manually, stapling papers, and adjusting stitchers. Managerial functions

TABLE 5

AVERAGE PERCENT MEMBERS PERFORMING TASK MODULES BY CAREER LADDER JOBS

TASK MODULE	DUPLICATION CLUSTER (STG16)	OFFSET DUPLICATOR JOB (STG37)	DUPLICATOR JOB (STG26)	SMALL PRINTING PRESS OPERATOR JOB (STG30)	DUP CENTER HIGH SPEED COPIER OPERATOR JOB (STG:9)
0001 PRODUCTION TRACKING (RAMS)	72	57	-	-	35
0002 CUSTOMER SERVICE	72	67	17	37	37
0003 WORKCENTER MANAGEMENT	53	34	3	16	1
0004 BINDERY DRILL DUTIES	57	80	28	87	27
0005 COPIER/DUPLICATOR MAINTENANCE	63	73	31	16	69
0006 SUPPLY DUTIES	54	43	-	15	-
0007 BINDERY OPERATORS	28	54	6	59	5
0008 COPIER/DUPLICATOR TROUBLE SHOOTING	25	38	6	3	13
0009 OFFSET DUPLICATOR MAINTENANCE	12	80	49	-	-
0010 OFFSET DUPLICATOR TROUBLE SHOOTING	-	30	8	-	-
0011 BASE COPIER USE PROGRAM DUTIES	-	14	-	-	-
0012 PRODUCTION CONTROL	55	38	3	16	4
0016 ADMINISTRATIVE CORRESPONDENCE	41	22	-	5	-
0021 FINANCIAL MANAGEMENT	42	18	-	-	-
0027 QUALITY ASSURANCE	36	38	4	11	7
0029 CIVILIAN PERSONNEL MANAGEMENT	17	3	-	20	-
0031 BINDERY EQUIPMENT MAINTENANCE	7	18	2	11	-
0032 LITHOGRAPH PLATE DUTIES	-	18	13	-	-
0033 NEGATIVES AND FLATS	-	15	3	-	-
0035 QUALITY ASSURANCE OF NEGATIVES	4	18	-	-	-
0038 LITHOGRAPHIC CAMERA DUTIES	-	12	-	-	-
0039 LARGE PRINTING PRESS MAINTENANCE	-	12	-	-	-
0040 LARGE PRINTING PRESS TROUBLE SHOOTING	-	7	-	-	-
0042 MICROGRAPHIC ACTIVITIES	-	2	-	-	-

- Indicates less than 1 percent

TABLE 5 (CONTINUED)

AVERAGE PERCENT MEMBERS PERFORMING TASK MODULES BY CAREER LADDER JOBS

TASK MODULE	PRINTING PLANT PRESS OPERATOR JOB (STG53)	LITHOGRAPH OPERATOR JOB (STG32)	COPIER MANAGER JOB (STG23)	MICROGRAPH OPERATOR JOB (STG56)
0001 PRODUCTION TRACKING (RAMS)	4	31	8	-
0002 CUSTOMER SERVICE	8	21	15	4
0003 WORKCENTER MANAGEMENT	10	40	14	-
0004 BINDERY DRILL DUTIES	50	33	15	-
0005 COPIER/DUPLICATOR MAINTENANCE	2	14	5	-
0006 SUPPLY DUTIES	8	44	22	6
0007 BINDERY OPERATORS	21	17	3	-
0008 COPIER/DUPLICATOR TROUBLE SHOOTING	-	-	-	-
0009 OFFSET DUPLICATOR MAINTENANCE	57	-	-	-
0010 OFFSET DUPLICATOR TROUBLE SHOOTING	10	-	-	-
0013 BASE COPIER USE PROGRAM DUTIES	-	2	55	-
0014 PRODUCTION CONTROL	3	20	2	-
0016 ADMINISTRATIVE CORRESPONDENCE	-	44	22	-
0021 FINANCIAL MANAGEMENT	-	11	25	-
0027 QUALITY ASSURANCE	13	28	5	3
0029 CIVILIAN PERSONNEL MANAGEMENT	-	38	6	-
0031 BINDERY EQUIPMENT MAINTENANCE	3	5	-	-
0032 LITHOGRAPH PLATE DUTIES	17	50	-	16
0033 NEGATIVES AND FLATS	-	51	-	-
0035 QUALITY ASSURANCE OF NEGATIVES	-	75	-	-
0038 LITHOGRAPHIC CAMERA DUTIES	-	89	-	-
0039 LARGE PRINTING PRESS MAINTENANCE	74	17	-	-
0040 LARGE PRINTING PRESS TROUBLE SHOOTING	-	-	-	-
0042 MICROGRAPHIC ACTIVITIES	-	-	-	-

- Indicates less than 1 percent

distinguish the Duplication Center NCOIC job, the third job within the cluster. This job is distinguished by the managerial and training tasks performed. The fourth job is the Copier Program Operator job which involves maintaining records of copier monitors and monitoring the use of copiers assigned to other units.

The final four jobs within the cluster are the managerial jobs, performed by mid- to senior-level NCOs, and are directly related to the functional areas of the career field. The first of these jobs is the Reprographics Manager. Personnel with this job perform a mixture of administrative and technical duties within duplicating centers. Tasks which distinguish this job range from adding staples and dry ink to establishing performance standards for subordinates. The Bindery Management job is distinguished by a wide mixture of tasks involving electrostatic duplicators, supply, production control, bindery duties, and workcenter management. The third job, Copier Management, differs from the previous jobs in that the emphasis is on tasks directly related to the base copier program. While the primary responsibilities of this job are managerial, technical tasks such as evaluating copier use, briefing users on copier procedures, and evaluating copier justification are still being performed. The final job within this cluster is the Printing Plant Management job. This is a purely managerial job, with no technical tasks being performed by the incumbents. The distinguishing tasks for this job include conducting staff meetings, planning briefings, supervising civilians, and maintaining contingency plans.

Representative modules comprising the majority of job time for this cluster are listed below. Accompanying the task module (TM) numbers and the module titles are: (1) the number of tasks included in the module, (2) the sum of percent time spent by all members of the cluster performing tasks in the module, (3) the cumulative time spent by respondents as each module is added, and (4) the average of the percent members performing all the tasks in each module. Refer to Appendix B to reference the tasks contained within each module.

<u>TM</u>	<u>Module Title</u>	No. of <u>Tasks</u>	Percent <u>Sum</u>	Time Spent <u>Cumulative</u>	Avg Percent <u>Members Perf</u>
0001	PRODUCTION TRACKING (RAMS)	4	5	5	72
0002	CUSTOMER SERVICE	6	7	12	72
0005	COPIER/DUPPLICATOR MAINTENANCE	14	12	24	63
0004	BINDERY DRILL DUTIES	9	5	29	57
0014	PRODUCTION CONTROL	5	3	32	55
0006	SUPPLY DUTIES	4	3	35	54
0003	WORKCENTER MANAGEMENT	17	11	46	53
0021	FINANCIAL MANAGEMENT	7	4	50	42
0013	BASE COPIER USE PROGRAM DUTIES	22	11	61	41
0027	QUALITY ASSURANCE	9	4	65	36

This table clearly shows the emphasis of the performance of the administrative, production control, and customer service duties common to all jobs within the cluster. It can also be noted that each job in the cluster can be distinguished by one task module within the table.

II. OFFSET DUPLICATOR (OD) JOB (STG37, N=60). Members with this job are responsible for the maintenance and the operation of either offset duplicators or small presses. Incumbents perform an average of 131 tasks which include cleaning and mounting blankets, adjusting ink flow, pile height controls, and copy quality displays, clearing Offset Duplicator (OD) jams, and monitoring OD operations. In addition, members with the job spend 15 percent of their time performing bindery tasks such as stapling and collating paper, adjusting stitchers, and loading and unloading collators. This job is distinguished from the jobs in the Duplication cluster by the amount of time spent on OD-specific tasks. The following are typical tasks members with the job perform:

- clean blankets
- adjust ink flow
- regulate balance of ink and water
- clear OD jams
- adjust stitchers
- regulate air or vacuum flow
- load or unload OD delivery systems
- dilute or mix chemicals for ODs
- remove masters
- adjust guides or cylinders
- adjust pile height controls
- load paper
- staple paper

Respondents holding this job are moderately experienced, averaging 7 years' time in service. Seventy-two percent hold the 5-skill level. Sixty percent are in paygrades E-4 and E-5, and 44 percent are in their first enlistment.

Some representative modules include the following:

<u>TM</u>	<u>Module Title</u>	<u>No. of Tasks</u>	<u>Percent Sum</u>	<u>Time Spent Cumulative</u>	<u>Avg Percent Members Perf</u>
0009	OFFSET DUPLICATOR MAINTENANCE	40	28	28	80
0004	BINDERY DRILL DUTIES	9	6	34	80

0005	COPIER/DUPLICATOR MAINTENANCE	14	10	44	73
0002	CUSTOMER SERVICE	6	4	48	67
0001	PRODUCTION TRACKING (RAMS)	4	2	50	57
0007	BINDERY OPERATORS	21	8	58	54

The table clearly shows the emphasis of this group on OD and bindery tasks. In addition, incumbents also perform tasks related to customer service and production control. This job represents the highest average percent members performing OD tasks (80 percent) in the study.

III. SMALL PRINTING PRESS OPERATOR JOB (STG26, N=6). This job constitutes 2 percent of the total sample. Incumbents with this job spend most of their time performing tasks dealing directly with maintaining and operating small printing presses. This includes removing masters, mounting masters on master cylinders, mounting blankets on blanket cylinders, and loading or unloading press delivery or feeder systems. This is a very limited job, as incumbents perform an average of 35 tasks. What distinguishes this job from the Offset Duplicator job is that it is much more limited in scope, with the incumbents performing a limited number of tasks in one duty. The following are typical tasks members with the job perform:

- clean blankets
- adjust ink flow
- remove masters
- mount masters on master cylinders
- mount blankets on blanket cylinders
- regulate balance of ink and water
- adjust guides or cylinders
- adjust multisheet detectors
- regulate air or vacuum flow
- adjust pile height controls
- clear OD jams

Respondents holding this job are relatively inexperienced personnel, averaging less than 4 years' time in service and reporting being in paygrades E-4 and below. Four of the respondents hold the 5-skill level, while 2 percent hold the 3-skill level.

Representative modules for the Small Printing Press Operator job include:

<u>TM</u>	<u>Module Title</u>	No. of <u>Tasks</u>	Percent <u>Sum</u>	Time Spent <u>Cumulative</u>	Avg Percent <u>Members Perf</u>
0009	OFFSET DUPLICATOR MAINTENANCE	40	61	61	49
0005	COPIER/DUPLICATOR MAINTENANCE	14	11	72	31
0004	BINDERY DRILL DUTIES	9	7	79	28
0032	LITHOGRAPHIC PLATE DUTIES	8	4	83	13

This table shows that respondents within this job report that they spend 83 percent of their job time performing tasks related to the four TMs listed, with the most time spent in the Offset Duplicator task module (61 percent). The module level data clearly display the narrowly defined scope of this job.

IV. PRINTING PLANT BINDERY JOB (STG30, N=5). Members in this job represent 2 percent of the survey sample and are responsible for the bindery duties necessary within a printing plant. They spend 63 percent of their duty time on such activities as sharpening, waxing, adjusting and installing drill bits, maintaining bindery equipment, and adjusting stitchers. This is also a limited job, as members perform an average of only 38 tasks. Representative tasks for this job include:

- collate paper by hand
- staple paper
- cut or trim paper stocks or printed materials
- wax drill bit ends
- select wire
- remove or replace cutting blades
- remove or replace cutting sticks
- perform operator maintenance on bindery equipment

Respondents holding this job are mid-level personnel, averaging 10 years' time in service. Four members hold the 7-skill level, while the other one holds the 5-skill level. Three respondents are in paygrade E-4, and two are in paygrade E-6.

The following are representative TMs members perform:

<u>TM</u>	<u>Module Title</u>	<u>No. of Tasks</u>	<u>Percent Sum</u>	<u>Time Spent Cumulative</u>	<u>Avg Percent Members Perf</u>
0004	BINDERY DRILL DUTIES	9	27	27	87
0007	BINDERY OPERATORS	21	35	62	59
0002	CUSTOMER SERVICE	6	6	68	37

The specialization in bindery activities becomes apparent when referencing the module table. Sixty-two percent of the respondents' duty time is spent performing tasks within the bindery modules.

V. DUPLICATION CENTER HIGH SPEED COPIER OPERATOR JOB (STG59, N=5). This job constitutes 2 percent of the total sample. Incumbents perform an average of 21 tasks, indicating that this job is also somewhat limited in focus. Respondents spend the majority of their duty time operating and maintaining copier/duplicators, which include such tasks as adding toner and dry ink, loading paper, and cleaning document handler belts, bezels, rolls, sensors, or mirrors. In addition to this, incumbents perform tasks such as notifying customers of completed work, maintaining job logs in RAMS, adjusting stitchers, and trimming paper stocks or printed materials. The following are typical tasks the members of this job perform:

- load paper
- adjust copy quality displays to include document type, exposure, density, photo contrast, or special job requirements
- add dry ink
- adjust reduction/shift displays to include preset reduction, variable reduction, or image shift
- load or unload document handler systems on electrostatic duplicators
- clear jams on electrostatic duplicators
- notify customer of completed work

Respondents in this entry-level job average 2 years' time in service. Three hold the 3-skill level, while two hold the 5-skill level, and four are in their first enlistment. One respondent is in paygrade E-4, while the others are in paygrades E-3 to E-1.

Some representative modules include:

<u>TM</u>	<u>Module Title</u>	No. of <u>Tasks</u>	Percent <u>Sum</u>	Time Spent <u>Cumulative</u>	Avg Percent <u>Members Perf</u>
0005	COPIER/DUPLICATOR MAINTENANCE	14	49	49	69
0001	PRODUCTION TRACKING	4	10	59	35
0002	CUSTOMER SERVICE	6	12	71	37

As can be noted in the table, 49 percent of the members' job time is spent performing tasks within Task Module 5. Supervisors and training personnel should consider the 14 tasks contained in this module when placing personnel into this job.

VI. PRINTING PLANT PRESS JOB (STG53, N=6). This job is performed by 2 percent of the sample who spend 43 percent of their duty time operating or maintaining large printing presses, 31 percent operating and maintaining offset duplicators or small presses, and 13 percent performing bindery activities. Incumbents of this moderately broad job perform an average of 78 tasks. Their responsibilities include adjusting printing press keys on fountain blades, water rollers, feeder mechanisms, and registration position. Members with this job are distinguished by the time they spend on the following tasks:

- adjust PP registration position
- adjust PP keys on ink fountain blades
- attach PP blankets to blanket cylinders
- set ink or water controls
- replenish water fountains
- adjust OD registration position
- clear OD jams
- adjust guides or cylinders
- moisten duplicating dampening rollers

This job is performed by moderately experienced personnel. Five are in paygrades E-4 and E-6, one holds the 7-skill level, and three hold the 5-skill level. Respondents average slightly more than 8 years' time in service.

Representative modules for the Printing Plant Press job include:

<u>TM</u>	<u>Module Title</u>	No. of <u>Tasks</u>	Percent <u>Sum</u>	Time Spent <u>Cumulative</u>	Avg Percent <u>Members Perf</u>
0039	LARGE PRINTING PRESS MAINTENANCE	39	41	41	74
0009	OFFSET DUPLICATOR MAINTENANCE	40	28	69	57
0004	BINDERY DRILL DUTIES	9	6	75	50

The specialization in large printing press duties becomes apparent when referencing the module table. Seventy-four percent of the members spend almost half of their time TMs related to large printing presses.

VII. **LITHOGRAPH OPERATOR JOB (STG32, N=4)**. This job is performed by 2 percent of the survey sample. Incumbents perform an average of 89 tasks in this broad job. They report spending 36 percent of their duty time performing lithographic camera activities, 10 percent evaluating and inspecting, and 10 percent of their time on administrative functions. Members in this job load and unload copyboards, set camera apertures, cut film to size, edit completed work, and track daily production. Typical tasks performed by members with the job include:

- load or unload copyboards
- inspect negatives
- process film in automatic film processors or dryers
- cut film to size
- adjust copyboards
- adjust camera lights
- adjust lensboards
- edit completed work for compliance with work requests
- select film types
- fabricate contact negatives or positives
- track daily production
- evaluate work schedules
- file negatives
- maintain equipment or supply inventories
- write EPRs

Respondents performing this job are the most experienced group within the study, averaging more than 15 years' time in service. Two members hold the 7-skill level, while the other two hold the 5-skill level. Incumbents are distributed equally among the E-4, E-5, E-7, and E-8 paygrades.

Representative modules include:

<u>TM</u>	<u>Module Title</u>	<u>No. of Tasks</u>	<u>Percent Sum</u>	<u>Time Spent Cumulative</u>	<u>Avg Percent Members Perf</u>
0038	LITHOGRAPHIC CAMERA DUTIES	26	34	34	66
0035	QUALITY ASSURANCE OF NEGATIVES	2	3	37	64
0033	NEGATIVES & FLATS	18	9	46	21
0027	QUALITY ASSURANCE	9	4	50	21

This table clearly illustrates the emphasis of this job on lithographic camera activities, with incumbents spending 34 percent of their total job time in Task Module 38. The table also emphasizes the other areas where members are spending their duty time, such as workcenter management, negatives and flats, and quality assurance.

VIII. COPIER MANAGEMENT JOB (STG23, N=9). Airmen in this job represent 4 percent of the total sample. They spend almost half of their job time in supervisory and training functions. Incumbents perform an average of 25 tasks in this very specialized job. Members are responsible for the use and maintenance of copier programs. Included in this responsibility are planning and implementing copier programs, monitoring the use of copiers assigned to other units, and drafting budget or financial requirements. In addition to these managerial duties, incumbents also perform such technical tasks as reviewing computer logs, maintaining records of copier monitors, and conducting orientation classes for copier monitors. Members with this job are distinguished by the time they spend performing the following tasks:

- plan copier programs
- implement copier programs
- establish copier programs
- monitor usage of copiers assigned to other units
- evaluate copier use
- evaluate copier justification
- evaluate copier programs
- review copier logs
- maintain records of copier monitors

- establish controls for copier use
- initiate AF Forms 9 (Request for Purchase)
- conduct orientation classes for copier monitors
- brief users on copying procedures
- draft budget or financial requirements

Respondents performing this job are relatively experienced, averaging over 10 years' time in service. There were no incumbents in their first enlistment, and the predominant paygrades are E-4 through E-7. Five of the respondents hold the 7-skill level, while four hold the 9-skill level.

Some representative modules for the Copier Management job include:

<u>TM</u>	<u>Module Title</u>	No. of <u>Tasks</u>	Percent <u>Sum</u>	Time Spent <u>Cumulative</u>	Avg Percent <u>Members Perf</u>
0013	BASE COPIER USE PROGRAM				
	DUTIES	22	63	63	55
0021	FINANCIAL MANAGEMENT	7	8	71	25
0006	SUPPLY DUTIES	4	4	75	22
0016	ADMINISTRATIVE				
	CORRESPONDENCE	4	3	78	22

The table displays the modules one would expect to see from a job of this nature, with the base copier module consuming 63 percent of the duty time of the incumbents of this job. In addition, other necessary elements are also displayed, such as the financial management, supply, customer service, and workcenter management clusters.

IX. MICROGRAPH OPERATOR JOB (STG56, N=4). This job is performed by 1 percent of all survey respondents. Respondents reported performing an average of 14 tasks in this extremely limited job. The focus of this job is on such micrographic duties as cutting microfiche, developing exposed film, and packaging microfiche. Incumbents report spending 85 percent of their duty time in micrographic activities and 6 percent performing lithographic platemaking activities. Examples of Micrograph Operator tasks performed by members with this job include:

- inspect completed micrographic work
- load or unload micrographic duplicators
- cut microfiche
- load or unload processors
- develop exposed film
- program computer output microform (COM) jobs
- package microfiche

fill and adjust chemical replenishment systems
 select micrographic cameras
 test film resolution with microscopes
 test film density with densiometers
 perform operator maintenance on micrographic equipment

Respondents holding this job are moderately experienced, averaging 7 years' time in service. Only one respondent reported being in the first enlistment, and all incumbents were in paygrades E-4 and E-5.

Some representative modules include:

<u>TM</u>	<u>Module Title</u>	No. of <u>Tasks</u>	Percent <u>Sum</u>	Time Spent <u>Cumulative</u>	Avg Percent <u>Members Perf.</u>
0042	MICROGRAPHIC ACTIVITIES	18	84	84	60
0032	LITHOGRAPHIC PLATE DUTIES	8	6	90	16
0006	SUPPLY DUTIES	4	2	92	6

As can be noted, personnel in this job spend 84 percent of their job time in Task Module 42. This indicates the level of specialization inherent in this job.

Comparison of Current Job Structure to Previous Study

The results of the specialty job analysis were compared to the results of the previous OSR, dated February 1988. Table 6 lists the major jobs identified in the 1994 report and their equivalent jobs from the 1988 OSR. A review of the jobs performed by the current sample indicates that five of the nine jobs in the current survey were matched to similar jobs identified in the 1988 report. The four jobs not matched include Offset Duplicator Operator job, Duplication Center High Speed Copier Operator job, Printing Plant Press Operator job, and the Printing Plant Copier Management job.

The Printing Management career ladder is characterized by a moderately diverse job structure. One cluster of jobs, the Duplication cluster, comprises the bulk of the specialty (55 percent). The remainder are distributed across jobs characterized by specialized equipment maintenance functions and jobs supporting administration, management, and training.

TABLE 6

SPECIALTY JOB COMPARISONS BETWEEN CURRENT AND 1988 703X0 SURVEY

DUPLICATION CLUSTER	CURRENT SURVEY	1988 SURVEY
- PRODUCTION CONTROL JOB	GENERAL PRINTING PERSONNEL	
- D.C. BINDERY WORKER JOB	PRODUCTION CONTROL	-
- D.C. NCOIC JOB	-	-
- COPIER PROGRAM OPERATOR JOB	REPROGRAPHICS SUPERVISORS	-
- REPRO MGT JOB	-	-
- BINDERY MGT JOB	COPIER MANAGERS	-
- COPIER MGT JOB	-	-
- PRINTING PLANT MGT JOB	-	-
OFFSET DUPLICATOR JOB	PRINTING PRESS PERSONNEL	-
SMALL PRINTING PRESS OPERATOR JOB	BINDERY PERSONNEL	-
PRINTING PLANT BINDERY JOB	DUPLICATION CENTER HIGH SPEED COPIER OPERATOR JOB	-
LITHOGRAPH OPERATOR JOB	PRINTING PLANT PRESS JOB	-
COPIER MANAGEMENT JOB	LITHOGRAPHY PERSONNEL	-
MICROGRAPH OPERATOR JOB	MICROGRAPHICS PERSONNEL	-

- Indicates no match in report

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information may be used to evaluate how well career ladder documents, such as AFMAN 36-2108 Specialty Descriptions and the STS, reflect what career ladder personnel are actually doing in the field.

The distribution of skill-level groups across the career ladder jobs for respondents is displayed in Table 7, while Table 8 offers another perspective by displaying percent time spent on each duty across the skill-level groups.

A typical pattern of progression is noted within the AFSC 3R0X1 career ladder, with personnel at the 3-skill level spending most of their time on technical tasks. More job time is spent on duties involving supervisory, managerial, and administrative tasks (see Table 8, Duties A, B, C, and D) as incumbents move upward to the 5- and 7-skill levels.

Skill-Level Descriptions

DAFSC 3R031. The 34 airmen in the 3-skill level group, representing 13 percent of the survey sample, perform an average of 55 tasks. As shown in Table 7, 38 percent of these airmen are in the Duplication Personnel cluster, while 29 percent grouped in the Offset Duplicator job. They spend approximately 46 percent of their time operating and maintaining offset duplicators, electrostatic duplicators, and small presses, while 18 percent of their time is spent on cutting, collating, stitching, and other bindery duties (see Table 8).

Examples of tasks likely to be performed by 3-skill level personnel include adding toners and dry ink; adjusting displays for copy requirements; cutting, trimming, and collating printed materials; and maintaining drill bits. Other examples of representative tasks performed by a majority of these airmen are shown in Table 9.

DAFSC 3R051. The 137 airmen in the 5-skill level group represent 54 percent of the total survey sample and perform an average of 87 tasks. Table 8 shows that 5-skill level personnel spend 62 percent of their relative job time performing duties which involve documentation, production control, operation and maintenance of both offset and electrostatic duplicators, and performance of various bindery activities. The remaining 38 percent is spent on a broad range of technical and managerial duties, as shown in Table 10.

Although 5-skill level personnel spend more than half of their job time performing technical duties, it is the percent of job time spent on supervisory functions that distinguishes them from 3-skill level apprentices. Table 11 shows that a higher percentage of 5-skill members perform tasks such as establishing production standards, directing workcenter activities, determining work priorities, and establishing stock levels.

TABLE 7

DISTRIBUTION OF SKILL-LEVEL MEMBERS
ACROSS CAREER LADDER JOBS
(PERCENT)

JOB	3R031 (N=34)	3R051 (N=137)	3R071 (N=77)
DUPLICATION CLUSTER	38	47	75
OFFSET DUPLICATOR JOB	29	30	9
SMALL PRINTING PRESS OPERATOR JOB	6	2	0
PRINTING PLANT BINDERY JOB	0	3	1
DUPLICATION CENTER HIGH SPEED COPIER OPERATOR JOB	9	1	0
PRINTING PLANT PRESS JOB	6	2	1
LITHOGRAPH OPERATOR JOB	0	1	3
COPIER MANAGEMENT JOB	0	3	6
MICROGRAPH OPERATOR JOB	0	3	0
NOT GROUPED	12	8	5

TABLE 8

TIME SPENT ON DUTIES BY MEMBERS OF SKILL-LEVEL GROUPS
 (RELATIVE PERCENT OF JOB TIME)

DUTIES	3R031 (N=34)	3R051 (N=137)	3R071 (N=77)
A ORGANIZING AND PLANNING	3	8	20
B DIRECTING AND IMPLEMENTING	1	6	15
C EVALUATING AND INSPECTING	2	6	12
D TRAINING	*	2	6
E PERFORMING ADMINISTRATIVE, SUPPLY, PRODUCTION CONTROL, AND COMMERCIAL PRINTING PROCUREMENT ACTIVITIES	14	20	18
F PERFORMING COPY MANAGEMENT ACTIVITIES	3	6	8
G PERFORMING ELECTROSTATIC PLATEMAKING ACTIVITIES	3	2	1
H PERFORMING LITHOGRAPHIC PLATEMAKING ACTIVITIES	2	1	*
I OPERATING AND MAINTAINING ELECTROSTATIC DUPLICATORS (HIGH-SPEED COPIERS/DUPLICATORS)	26	14	7
J OPERATING AND MAINTAINING OFFSET DUPLICATORS (ODs) OR SMALL PRESSES	20	13	4
K OPERATING OR MAINTAINING LARGE PRINTING PRESSES	5	2	1
L PERFORMING BINDERY ACTIVITIES	18	15	7
M PERFORMING LITHOGRAPHIC CAMERA ACTIVITIES	*	1	1
N PERFORMING LAYOUT OR STRIPPING ACTIVITIES	3	1	*
O PERFORMING MICROGRAPHIC ACTIVITIES	--	3	*

* Denotes less than 1 percent

-- Denotes no response

TABLE 9

**REPRESENTATIVE TASKS PERFORMED BY
DAFSC 3R031 PERSONNEL**

TASKS	PERCENT MEMBERS PERFORMING (N=34)
I236 Load paper	79
I227 Adjust copy quality displays to include document type, exposure, density, photo contrast, or special job requirements	79
I228 Adjust reduction/shift displays to include preset reduction, variable reduction, or image shift	74
L401 Staple paper	71
I226 Add toners	68
I224 Add dry ink	65
L371 Cut or trim paper stocks or printed materials	65
L368 Adjust stitchers	65
I234 Clear jams on electrostatic duplicators	62
I225 Add staples	62
I232 Clean machine surfaces to include document glass or paper detector	59
I230 Clean document handler belts, bezels, rolls, sensors, or mirrors	56
L370 Collate paper by hand	56
E124 Distribute completed work	53
I250 Unload or sort originals from electrostatic duplicators	53
E154 Notify customer of completed work	50
I235 Load or unload document handler systems on electrostatic duplicators	50
J268 Clean blankets	50
J255 Adjust ink flow	50
L402 Wax drill bit ends	50
E156 Place service calls	47
L375 Install drill bits or spindles	47
J287 Regulate balance of ink and water	47
J269 Clear OD jams	47
E140 Maintain job logs in computer using RAMS	47
I237 Monitor electrostatic duplicator operations	44
L363 Adjust drill back gauges	44
J285 Prepare OD plates for mounting	44
J265 Adjust pile height controls	44
J286 Regulate air or vacuum flow	44

TABLE 10
REPRESENTATIVE TASKS PERFORMED BY
DAFSC 3R051 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=137)
E156 Place service calls	80
I236 Load paper	77
L402 Wax drill bit ends	72
E154 Notify customer of completed work	71
L401 Staple paper	70
E162 Review printing or duplication requests	69
I226 Add toners	69
I227 Adjust copy quality displays to include document type, exposure, density, photo contrast, or special job requirements	69
L368 Adjust stitchers	69
E140 Maintain job logs in computer using RAMS	68
L371 Cut or trim paper stocks or printed materials	67
I225 Add staples	67
I234 Clear jams on electrostatic duplicators	66
I228 Adjust reduction/shift displays to include preset reduction, variable reduction, or image shift	66
L370 Collate paper by hand	64
L375 Install drill bits or spindles	64
A5 Determine or establish work priorities	63
I232 Clean machine surfaces to include document glass or paper detector	62
L383 Marry sections manually	61
E124 Distribute completed work	60
E167 Verify duplicating or printing requests	59
E166 Track daily production	58
E161 Process incoming or outgoing distribution	56
I224 Add dry ink	56
L363 Adjust drill back gauges	58
I235 Load or unload document handler systems on electrostatic duplicators	54
L365 Adjust drill side gauges	54
E139 Maintain inventories in computers using Reprographics Automated Management System (RAMS)	52
E138 Maintain file of work requests	52
I250 Unload or sort originals from electrostatic duplicators	52

TABLE II

**TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 3R031 AND DAFSC 3R051 PERSONNEL
(PERCENT MEMBERS PERFORMING)**

TASKS	3R031 (N=34)	3R051 (N=137)	DIFFERENCE
A20 Establish production standards	3	37	-34
E166 Track daily production	24	58	-34
L383 Marry sections manually	26	60	-34
E156 Place service calls	47	80	-33
E126 Initiate AF Forms 9 (Request for Purchase)	0	32	-32
C67 Edit completed work for compliance with work requests	6	37	-31
B43 Direct workcenter activities	3	34	-31
E137 Maintain equipment or supply inventories	12	42	-30
E155 Pick up supplies	21	51	-30
A5 Determine or establish work priorities	32	62	-30
E162 Review printing or duplication requests	38	68	-30
B40 Direct maintenance or utilization of equipment	3	33	-30
C64 Analyze workload requirements	12	42	-30
B37 Counsel personnel on personal or military-related matters	0	29	-29
A18 Establish performance standards for subordinates	0	29	-29
E160 Prepare production reports	9	38	-29
B39 Direct maintenance of administrative files	0	28	-28
A21 Establish stock levels	3	31	-28
A6 Determine requirements for space, equipment, personnel, or supplies	3	31	-28
E122 Compute cost-production data	6	34	-28
A8 Develop or establish work methods or production controls	18	45	-27
A28 Plan or schedule work assignments	6	33	-27
A4 Determine most economical methods for reproduction	18	45	-27
B41 Direct quality control programs	0	26	-26
C75 Evaluate duplicating center operations	0	26	-26

DAFSC 3R070. Seven-skill level personnel represent 30 percent of the survey sample and perform an average of 113 tasks. Fifty-one percent of their relative job time is spent on tasks in supervisory, managerial, and training duties (almost twice that of 5-skill level personnel). The remaining 49 percent of their time, as can be seen in Table 12, is dedicated to technical duties such as placing service calls, preparing production reports, reviewing requests, and notifying customers of completed work. Tasks which best distinguish 7-skill level personnel from their more junior counterparts are presented in Table 13. As expected, the key difference is higher percentage of members performing supervisory functions such as assigning personnel to duty stations, writing recommendations for awards, counseling personnel on both personal and military matters, and writing EPRs.

Summary

A typical career ladder progression within the Printing Management career ladder is evident, with personnel at the 3-skill level spending the vast majority of their job time performing technical tasks. A moderate shift towards supervisory functions occurs at the 5-skill level, with members still spending more than 80 percent of their duty time performing technical functions. Personnel at the 7-skill level perform both technical and supervisory functions, with a relatively higher percentage of their time spent on supervisory duties, as compared to more junior personnel.

ANALYSIS OF AFMAN 36-2108 SPECIALTY DESCRIPTIONS

Survey data were compared to the AFMAN 36-2108 Specialty Descriptions for Reprographic Specialists and Technicians, dated 15 March 1991, effective 30 April 1991. The descriptions for the 3-, 5-, and 7-skill levels were generally accurate, depicting the highly technical aspects of the job, as well as the increase in supervisory responsibilities previously described in the DAFSC analysis. The descriptions also capture the primary responsibilities of members in the nine jobs identified by the job structure analysis process.

TRAINING ANALYSIS

Occupational survey data are sources of information which can be used to assist in the developing relevant training programs for entry-level personnel. Factors used to evaluate entry-level Printing Management training include jobs being performed by first-enlistment personnel,

TABLE 12
REPRESENTATIVE TASKS PERFORMED BY
DAFSC 3R071 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=77)
B37 Counsel personnel on personal or military-related matters	79
A5 Determine or establish work priorities	78
E156 Place service calls	75
A18 Establish performance standards for subordinates	73
A34 Write recommendations for awards or decorations	71
C92 Write EPRs	70
C81 Evaluate personnel for compliance with performance standards	70
A1 Assign personnel to duty positions	70
E126 Initiate AF Form 9 (Request for Purchase)	69
A6 Determine requirements for space, equipment, personnel, or supplies	69
A4 Determine most economical methods for reproduction	69
A8 Develop or establish work methods or production controls	69
B43 Direct workcenter activities	68
C74 Evaluate copier programs	68
B40 Direct maintenance or utilization of equipment	68
A11 Draft budget or financial requirements	66
E160 Prepare production reports	66
B36 Conduct staff meetings	66
B61 Supervise Reprographics Specialists (AFSC 70350)	65
B41 Direct quality control programs	65
A20 Establish production standards	65
A3 Calculate value of equipment	65
A17 Establish organizational policies, such as operating instructions (OIs), or standard operating procedures (SOPs)	65
E162 Review printing or duplication requests	64
A32 Schedule personnel for leaves, passes, or temporary duty (TDY)	64
B42 Direct utilization of equipment	64
A28 Plan or schedule work assignments	62
A13 Establish copier programs	62
E154 Notify customer of completed work	62
B53 Interpret policies, directives, or procedures for subordinates	62

TABLE 13

**TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 3R051 AND DAFSC 3R071 PERSONNEL
(PERCENT MEMBERS PERFORMING)**

TASKS	3R051 (N=137)		3R071 (N=77)		DIFFERENCE
	3R051 (N=137)	3R071 (N=77)	3R051 (N=137)	3R071 (N=77)	
J278 Operate automated OD blanket cleaner	38	13	38	13	25
L402 Wax drill bit ends	72	47	72	47	25
L401 Staple paper	70	45	70	45	25
L380 Load or unload folding machines	37	13	37	13	24
J279 Operate automated OD control panels	37	14	37	14	23
J276 Mount blankets on blanket cylinders	39	17	39	17	22
L371 Cut or trim paper stocks or printed materials	67	45	67	45	22
L379 Load or unload collators	47	26	47	26	21
J281 Operate automated OD master ejector	34	13	34	13	21
J277 Mount masters on master cylinders	39	18	39	18	21
J288 Remove masters	42	21	42	21	21
J287 Regulate balance of ink and water	42	21	42	21	21
I226 Add toners	69	48	69	48	21
L370 Collate paper by hand	64	44	64	44	20
A1 Assign personnel to duty positions	16	70	16	70	-54
A34 Write recommendations for awards or decorations	18	71	18	71	-53
A17 Establish organizational policies, such as operating instructions (OIs), or standard operating procedures (SOPs)	14	65	14	65	-51
B37 Counsel personnel on personal or military-related matters	29	79	29	79	-50
B36 Conduct staff meetings	18	66	18	66	-48
A11 Draft budget or financial requirements	20	66	20	66	-46
A2 Assign sponsors for newly assigned personnel	8	54	8	54	-46

TABLE 13 (CONTINUED)

**TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 3R051 AND DAFSC 3R071 PERSONNEL
(PERCENT MEMBERS PERFORMING)**

<u>TASKS</u>	<u>3R051 (N=137)</u>	<u>3R071 (N=77)</u>	<u>DIFFERENCE</u>
C87 Evaluate work schedules	16	62	-46
A32 Schedule personnel for leaves, passes, or temporary duty (TDY)	18	64	-46
B61 Supervise Reprographics Specialists (AFSC 70350)	19	65	-46
C92 Write EPRs	26	70	-44
A18 Establish performance standards for subordinates	29	73	-44
C81 Evaluate personnel for compliance with performance standards	27	70	-43
C85 Evaluate safety or security programs	16	58	-42
C79 Evaluate maintenance or use of workspace, equipment, or supplies	18	60	-42
C74 Evaluate copier programs	26	68	-42
A30 Plan safety programs or security	15	57	-42
C72 Evaluate budget requirements	18	60	-42

overall distribution of first-enlistment personnel across career ladder jobs, percent first-job (1-24 months' TAFMS) and first-enlistment (1-48 months' TAFMS) members performing specific tasks, ratings of how much TE tasks should receive in formal training, and ratings of relative difficulty of tasks.

First-Enlistment Personnel

In this study, there are 72 AFSC 3R0X1 members in their first enlistment (1-48 months' TAFMS), representing 28 percent of the survey sample. As displayed in Table 14, approximately 91 percent of their duty time is devoted to performing technical and administrative tasks. AFSC 3R0X1 personnel spend the majority of their job time in four areas: operating and maintaining electrostatic duplicators (24 percent); performing bindery activities (19 percent); operating and maintaining offset duplicators (ODs) or small presses (18 percent); and performing administrative, supply, production control, and commercial printing procurement activities (17 percent). The vast majority of first-enlistment personnel are involved in day-to-day Printing Management activities. Table 15 shows typical tasks performed by first-enlistment personnel, most of which deal with technical tasks such as loading and stapling paper, adding toners and dry ink, distributing completed work, maintaining job logs using RAMS, adjusting stitchers, and collating paper by hand. Equipment utilized by 30 percent or more of either first-job or first-enlistment personnel is listed in Table 16. The majority of these personnel utilize high-speed duplicators, drills, powered and manual paper cutters, and both side and saddle stitchers.

Within the groups identified in the **SPECIALTY JOBS** section of this report, first-enlistment personnel were present in eight of the nine jobs. As shown in Figure 3, 43 percent of first-enlistment personnel surveyed are grouped in the Duplication cluster, and another 37 percent grouped with the Offset Duplicator job. This fairly even split suggests that task factor information should be carefully examined for tasks performed by low percentages of first-enlistment personnel.

TE and TD Data

TE and TD data are secondary task factors that can help training development personnel decide which tasks to emphasize for entry-level training. These ratings, based on the judgments of senior career ladder NCOs at operational units, provide a rank-ordering of those tasks considered important for first-enlistment airman training (TE) and a measure of the relative difficulty of those tasks (TD). When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors (TE and TD), accompanied by moderate to high percentages performing, may warrant resident training. Those

TABLE 14
RELATIVE PERCENT OF TIME SPENT ACROSS DUTIES BY
FIRST ENLISTMENT DAFSC 3R0X1 PERSONNEL

<u>DUTIES</u>	<u>PERCENT TIME SPENT 3R0X1</u>
A ORGANIZING AND PLANNING	4
B DIRECTING AND IMPLEMENTING	3
C EVALUATING AND INSPECTING	2
D TRAINING	*
E PERFORMING ADMINISTRATIVE, SUPPLY, PRODUCTION CONTROL, AND COMMERCIAL PRINTING PROCUREMENT ACTIVITIES	17
F PERFORMING COPY MANAGEMENT ACTIVITIES	2
G PERFORMING ELECTROSTATIC PLATEMAKING ACTIVITIES	2
H PERFORMING LITHOGRAPHIC PLATEMAKING ACTIVITIES	2
I OPERATING AND MAINTAINING ELECTROSTATIC DUPLICATORS (HIGH-SPEED COPIERS/DUPLICATORS)	24
J OPERATING AND MAINTAINING OFFSET DUPLICATORS (ODs) OR SMALL PRESSES	18
K OPERATING OR MAINTAINING LARGE PRINTING PRESSES	2
L PERFORMING BINDERY ACTIVITIES	19
M PERFORMING LITHOGRAPHIC CAMERA ACTIVITIES	2
N PERFORMING LAYOUT OR STRIPPING ACTIVITIES	2
O PERFORMING MICROGRAPHIC ACTIVITIES	1

* Denotes less than 1 percent

TABLE 15
REPRESENTATIVE TASKS PERFORMED BY
FIRST-ENLISTMENT AFSC 3R0X1 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING 3R0X1 (N=72)
I236 Load paper	85
I227 Adjust copy quality displays to include document type, exposure, density, photo contrast, or special job requirements	82
I228 Adjust reduction/shift displays to include preset reduction, variable reduction, or image shift	76
L401 Staple paper	76
I226 Add toners	75
I234 Clear jams on electrostatic duplicators	74
L371 Cut or trim paper stocks or printed materials	74
L368 Adjust stitchers	72
I225 Add staples	71
L370 Collate paper by hand	71
I224 Add dry ink	69
E124 Distribute completed work	68
I232 Clean machine surfaces to include document glass or paper detector	68
L402 Wax drill bit ends	67
E156 Place service calls	65
I230 Clean document handler belts, bezels, rolls, sensors, or mirrors	61
E140 Maintain job logs in computer using RAMS	61
I235 Load or unload document handler systems on electrostatic duplicators	60
I250 Unload or sort originals from electrostatic duplicators	58
E154 Notify customer of completed work	58
L375 Install drill bits or spindles	56
E162 Review printing or duplication requests	54
E167 Verify duplicating or printing requests	53
L383 Marry sections manually	53
L363 Adjust drill back gauges	51
I237 Monitor electrostatic duplicator operations	50
L365 Adjust drill side gauges	50
E161 Process incoming or outgoing distribution	49
J255 Adjust ink flow	49
I239 Perform exception programming	47

TABLE 16

**EQUIPMENT ITEMS USED BY MORE THAN 30 PERCENT OF FIRST JOB
OR FIRST-ENLISTMENT AFSC 3R0X1 PERSONNEL**

EQUIPMENT	3R0X1 1ST JOB (N=30)	3R0X1 1ST ENL (N=72)
ELECTROSTATIC OR HIGH-SPEED DUPLICATORS	73	76
MULTIPLE HEAD DRILLS	70	69
POWERED PAPER CUTTERS	70	67
MANUAL PAPER CUTTERS	67	56
SIDE STITCHERS	60	64
SADDLE STITCHERS	53	60
OFFSET OR SMALL PRESS DUPLICATORS	47	56
ELECTRIC STAPLERS	47	40
PLATEMAKERS	40	46
TYPEWRITERS	30	35
PLATEMAKING CAMERAS	27	33
BINDING MACHINES	27	32

JOBs PERFORMED BY FIRST-ENLISTMENT AFSC 3R0X1 PERSONNEL

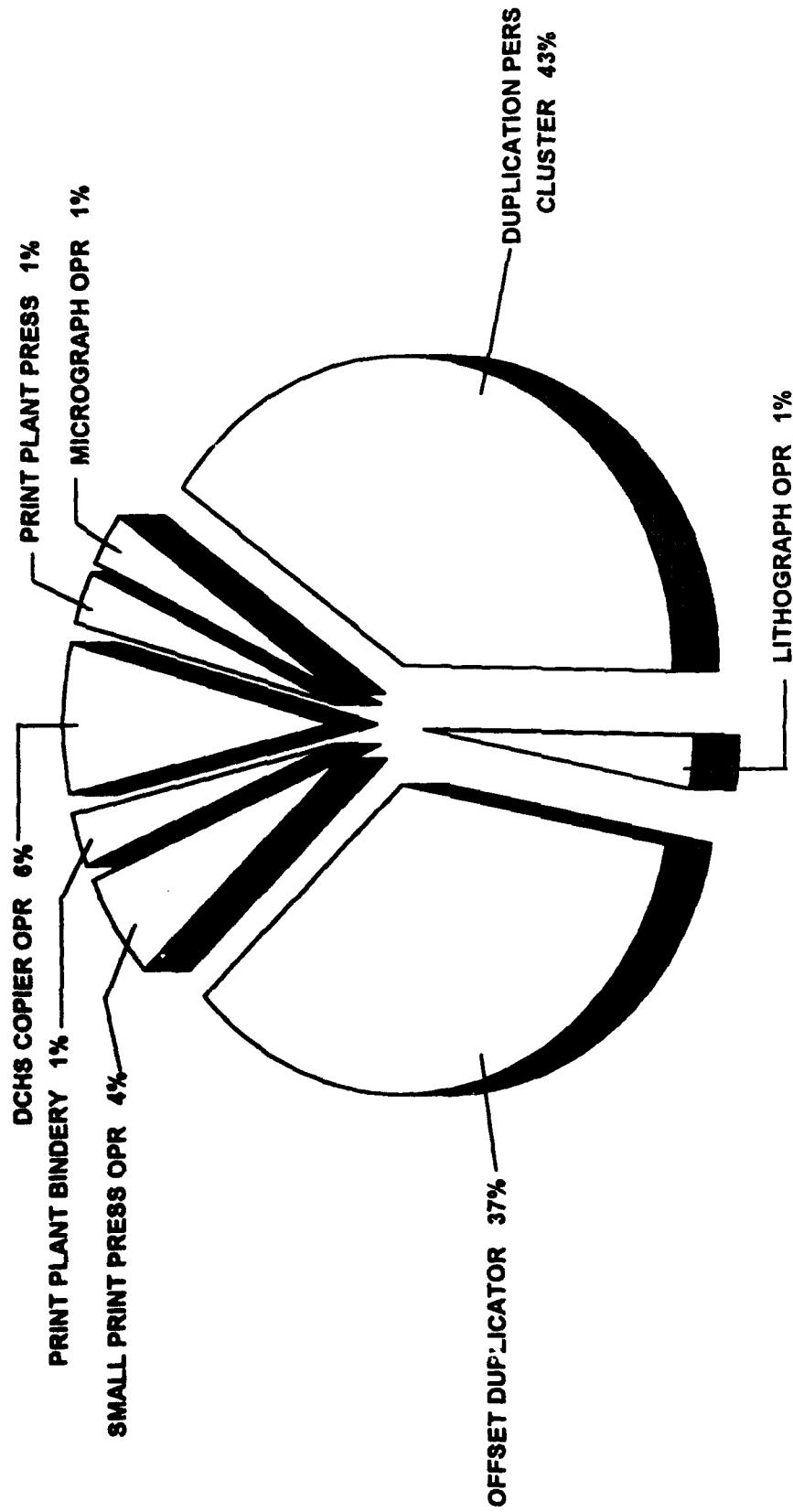


FIGURE 3

tasks receiving high task factor ratings, but low percentages performing, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for first-enlistment personnel. These decisions must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

To assist training development personnel, AFOMS developed a computer program that uses these task factors and the percentage of first-enlistment personnel performing tasks to produce Automated Training Indicators (ATI). ATI correspond to training decisions listed and defined in the Training Decision Logic table found in Attachment 1, ATCR 52-22. ATI allows training developers to quickly focus attention on those tasks which are most likely to qualify for ABR course consideration.

Tasks having the highest TE ratings are listed in Table 17. Included for each task are the percentage of first-job and first-enlistment personnel performing and the TD rating. As illustrated in Table 17, tasks with the highest TE ratings deal with clearing jams on electrostatic duplicators, cutting and trimming paper stocks or printed materials, adjusting ink flow, regulating balance of ink and water, and adjusting OD keys on ink fountain blades; these tasks are performed by high percentages of first-job and first-enlistment personnel.

Table 18 lists the tasks having the highest TD ratings. The percentage of first-enlistment, first-job, 5-, and 7-skill level personnel performing, and TE rating are also included for each task. Most tasks with high TD ratings are supervisory and administrative functions and are performed by quite low percentages of first-job, first-enlistment, 5-, and 7-skill level members. They also have low TE ratings.

Various lists of tasks, accompanied by TE and TD ratings, are contained in the TRAINING EXTRACT package and should be reviewed in detail by technical school personnel. For a more detailed explanation of TE and TD ratings, see Task Factor Administration in the SURVEY METHODOLOGY section of this report.

JOB SATISFACTION ANALYSIS

An examination of job satisfaction indicators can give career ladder managers a better understanding of factors that may affect the job performance of career ladder airmen. Therefore, the survey booklet included questions about job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions. The responses of the current survey sample were then analyzed by making several comparisons. (1) among TAFMS groups of AFSC 3R0X1 career ladder and a comparative sample of personnel from other Command Support career ladders, (2) between current and previous survey TAFMS groups, and (3) across the cluster and jobs identified in the SPECIALTY JOBS section of this report.

TABLE 17

SAMPLE OF TASKS WITH HIGHEST TRAINING EMPHASIS RATINGS

TASKS	PERCENT MEMBERS PERFORMING				TSK DIFF
	TNG EMP	1ST JOB	1ST ENL		
J287 Regulate balance of ink and water	6.97	43	47	47	5.52
J283 Perform operator maintenance on ODs	6.50	23	32	32	5.61
J256 Adjust multisheet detectors	6.38	37	42	42	4.31
J255 Adjust ink flow	6.34	47	49	49	4.93
J261 Adjust OD keys on ink fountain blades	6.31	43	43	43	4.80
J269 Clear OD jams	6.28	37	43	43	3.52
J270 Dilute or mix chemicals for ODs	6.25	40	42	42	4.03
I240 Perform operator maintenance on electrostatic duplicators	6.25	40	44	44	5.34
J265 Adjust pile height controls	6.22	40	43	43	4.84
J262 Adjust OD registration position	6.19	37	36	36	5.37
J259 Adjust OD images	6.16	33	35	35	5.23
J276 Mount blankets on blanket cylinders	6.12	37	44	44	5.20
G201 Perform operator maintenance on electrostatic platemaking equipment	6.12	17	15	15	5.55
J251 Adjust guides or cylinders	6.12	37	44	44	5.35
G193 Adjust position of images on electrostatic masters	6.09	27	28	28	4.27
J286 Regulate air or vacuum flow	6.06	43	46	46	4.62
J266 Adjust pressure between blanket cylinders and impression cylinders	6.03	27	32	32	5.84
J267 Adjust pressure between master cylinders and blanket cylinders	6.03	30	32	32	5.85
G188 Adjust EMI exposure time	6.00	13	21	21	4.43

TE MEAN = 3.08 S.D. = 1.58 (High = 4.66)
 TD MEAN = 5.00 S.D. = 1.00

TABLE I7 (CONTINUED)

SAMPLE OF TASKS WITH HIGHEST TRAINING EMPHASIS RATINGS

TASKS	PERCENT MEMBERS PERFORMING			TSK DIFF
	TNG EMP	1ST JOB	1ST ENL	
J279 Operate automated OD control panels	5.97	40	40	3.81
J277 Mount masters on master cylinders	5.94	30	39	4.05
J275 Monitor OD operations	5.91	37	35	4.76
G195 Compute amounts of image enlargements or reductions for electrostatic platemaking	5.91	17	19	4.90
J260 Adjust OD ink rollers	5.84	30	35	5.37
J284 Prepare OD blankets for mounting	5.81	23	29	3.97
L371 Cut or trim paper stocks or printed materials	5.81	70	74	4.14
I234 Clear jams on electrostatic duplicators	5.75	63	74	4.38
G202 Prepare offset plates using EMIs	5.75	23	24	4.38
I230 Clean document handler belts, bezels, rolls, sensors, or mirrors	5.75	47	61	4.77
G192 Adjust EMI master feed height	5.75	13	14	4.30

TE MEAN = 3.08 S.D. = 1.58 (High = 4.66)

TD MEAN = 5.00 S.D. = 1.00

TABLE 18

SAMPLE OF TASKS WITH HIGHEST TASK DIFFICULTY RATINGS

TASKS	PERCENT MEMBERS PERFORMING					TNG EMP
	TSK DIFF	1ST JOB	1ST ENL	3R051	3R071	
D104 Develop resident course or career development course (CDC) curriculum materials	8.04	0	0	1	4	.88
A29 Plan printing plant operations	8.01	0	0	4	6	.88
A11 Draft budget or financial requirements	7.72	0	1	20	66	1.59
B49 Implement printing plant operations	7.52	3	1	6	12	.56
D102 Develop course curricula	7.44	0	0	2	9	.91
B62 Supervise Reprographics Superintendents (AFSC 70390)	7.31	0	0	1	1	.34
A13 Establish copier programs	7.27	0	4	26	62	1.97
D103 Develop lesson plans	7.26	0	0	3	12	1.06
A14 Establish duplicating center operations	7.17	7	6	21	48	1.47
A16 Establish micrographic facility operations	7.14	0	0	2	9	.41
A27 Plan micrographic facility operations	7.12	0	0	3	3	.22
C93 Write staff studies, surveys, or special reports	7.11	0	0	9	38	1.06
D105 Develop specialty training standards (STS)	7.08	0	0	4	18	.91
A31 Prepare requests for bids	7.07	3	3	9	30	1.38
C83 Evaluate printing plant operations	7.02	3	3	4	6	.75
D119 Write test questions	7.02	0	0	1	5	.56
A24 Plan copier programs	6.95	0	6	26	61	2.16
A34 Write recommendations for awards or decorations	6.94	0	0	18	71	1.28
B46 Implement cost-reduction programs	6.90	3	4	22	56	1.62

TABLE 18 (CONTINUED)

SAMPLE OF TASKS WITH HIGHEST TASK DIFFICULTY RATINGS

TASKS	PERCENT MEMBERS PERFORMING					TNG EMP
	TSK DIFF	1ST JOB	1ST ENL	3R051	3R071	
C80 Evaluate micrographic facility operations	6.89	0	1	5	6	.41
C91 Write civilian performance ratings or supervisory appraisals	6.87	0	0	2	18	.69
A12 Establish commercial printing procurement programs	6.87	0	1	14	55	1.69
B45 Implement copier programs	6.84	0	10	31	53	2.31
A7 Develop inputs to mobility, disaster preparedness, unit emergency, or alert plans	6.83	3	4	13	39	1.34
D98 Conduct resident course classroom training	6.79	0	0	2	6	.75
C92 Write EPRs	6.75	0	0	26	70	2.50
C76 Evaluate equipment before purchase or rental	6.74	0	0	11	51	1.88
C72 Evaluate budget requirements	6.71	0	6	18	60	1.62
B48 Implement micrographic facility operations	6.70	0	0	3	4	.53
A25 Plan duplicating center operations	6.70	7	7	22	48	2.16

TD MEAN = 5.00 S.D. = 1.00
 TE MEAN = 3.08 S.D. = 1.58 (High = 4.66)

Table 19 compares first-enlistment (1-48 months' TAFMS), second-enlistment (49-96 months' TAFMS), and career (97+ months' TAFMS) group data to corresponding enlistment groups from other Command Support AFSCs surveyed during the previous calendar year. These data give a relative measure of how the job satisfaction of AFSC 3R0X1 personnel compares with similar AF specialties. Printing Management personnel reported generally lower job satisfaction than members of the comparative sample. However, the career group rated their job interest, perceived use of training, and sense of accomplishment higher than that of the comparative sample career group. Overall, satisfaction for all three TAFMS groups is still relatively high. The percentages of positive responses in these comparisons reflect a career ladder where personnel appear to be quite satisfied with their jobs.

An indication of changes in job satisfaction perceptions within the career ladder is provided in Table 20 which presents TAFMS group data for respondents of the current study and data from respondents to the last OSR of the career ladder in 1988 (AFSC 703X0). Generally, perceptions of job satisfaction have changed somewhat for all TAFMS groups when compared to the AFSC 703X0 sample. First-enlistment personnel show an increase in both job interest and perceived use of talent. Second-enlistment personnel decrease in perceived use of training, while career group personnel show a decrease in job interest. Overall, job satisfaction has remained stable within the career ladder.

Table 21 presents job satisfaction data for members with the major jobs identified in the career ladder structure for AFSC 3R0X1. An examination of these data may reveal indications of concern to functional managers. A comparison between major jobs identified in the current sample reveals that members in the Lithograph Operator job have the highest level of job satisfaction, while personnel in the Micrograph Operator job the least satisfied. Of the jobs which were found located in the Duplication cluster, members with the Duplication Center Electrostatic Duplicator job, Repographics Management job, and the Printing Plant Management job have the highest level of job satisfaction, while personnel in the Duplication Center Bindery Worker job are the least satisfied.

TABLE 19

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 3R0X1
 TAFMS GROUPS IN CURRENT SURVEY TO A COMPARATIVE SAMPLE
 (PERCENT MEMBERS RESPONDING)

	1-48 MONTHS TAFMS			49-96 MONTHS TAFMS			97+ MONTHS TAFMS			
	3R0X1		3R0X1		3R0X1		3R0X1		3R0X1	
	COMP (N=72)	SAMPLE (N=190)	COMP (N=55)	SAMPLE (N=372)	COMP (N=166)	SAMPLE (N=126)	COMP (N=166)	SAMPLE (N=126)	COMP (N=166)	SAMPLE (N=126)
EXPRESSED JOB INTEREST										
INTERESTING	63	72	67	75	76	74				
SO-SO	25	18	16	17	12	16				
DULL	12	10	17	8	12	10				
PERCEIVED USE OF TALENTS										
FAIRLY WELL TO PERFECT	73	82	74	82	83	83				
NONE TO VERY LITTLE	27	18	26	18	17	17				
PERCEIVED USE OF TRAINING										
FAIRLY WELL TO PERFECT	67	76	71	78	80	77				
NONE TO VERY LITTLE	33	24	29	22	20	23				
SENSE OF ACCOMPLISHMENT FROM JOB										
SATISFIED	74	68	75	70	75	68				
NEUTRAL	14	11	11	6	10	7				
DISSATISFIED	12	21	14	24	15	25				
REENLISTMENT INTENTIONS										
YES OR PROBABLY YES	76	31	82	30	69	39				
NO OR PROBABLY NO	24	56	18	50	10	42				
WILL RETIRE	0	13	0	20	21	19				

TABLE 20

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 3ROX1
 TAFMS GROUPS IN CURRENT SURVEY TO 1988 703X0 SURVEY
 (PERCENT MEMBERS RESPONDING)

	1-48 MONTHS TAFMS			49-96 MONTHS TAFMS			97+ MONTHS TAFMS		
	1993		1988	1993		1988	1993		1988
	(N=72)	(N=217)	(N=55)	(N=102)	(N=126)	(N=142)			
<u>EXPRESSED JOB INTEREST</u>									
INTERESTING	87	63	75	73	76	87			
SO-SO	7	21	14	17	12	11			
DULL	6	16	11	10	12	2			
<u>PERCEIVED USE OF TALENTS</u>									
FAIRLY WELL TO PERFECT	84	66	79	77	83	86			
NONE TO VERY LITTLE	16	34	21	23	17	14			
<u>PERCEIVED USE OF TRAINING</u>									
FAIRLY WELL TO PERFECT	84	73	66	74	80	85			
NONE TO VERY LITTLE	16	27	34	26	20	15			
<u>REENLISTMENT INTENTIONS</u>									
YES OR PROBABLY YES	47	60	63	70	69	62			
NO OR PROBABLY NO	53	38	37	26	10	10			
WILL RETIRE	0	2	0	4	21	18			

TABLE 21

JOB SATISFACTION INDICATORS FOR AFSC 3R0X1 JOBS
 (PERCENT MEMBERS RESPONDING)

	DUPLICATION CLUSTER				COPIER	REPRO PROGRAM OPERATOR	MGNT JOB	JOB	(STG38) (STG62)
	D.C.	D.C.	NCOIC JOB	STG55)	(STG63)	(STG55)	(STG55)	(STG55)	(STG38)
PRODUCTION	80	46	71						
CONTROL	20	29	29						
JOB	0	25	0						
(STG35)	(STG35)	(STG63)	(STG55)						
EXPRESSED JOB INTEREST									
INTERESTING									
SO-SO									
DULL									
PERCEIVED USE OF TALENTS									
FAIRLY WELL TO PERFECT									
NONE TO VERY LITTLE									
PERCEIVED USE OF TRAINING									
FAIRLY WELL TO PERFECT									
NONE TO VERY LITTLE									
SENSE OF ACCOMPLISHMENT FROM JOB									
SATISFIED	80	58	100						
NEUTRAL	20	21	0						
DISSATISFIED	0	21	0						
REENLISTMENT INTENTIONS									
YES OR PROBABLY YES	80	75	71						
NO OR PROBABLY NO	20	25	14						
WILL RETIRE	0	0	14						

TABLE 21 (CONTINUED)

JOB SATISFACTION INDICATORS FOR AFSC 3R0X1 JOBS
(PERCENT MEMBERS RESPONDING)

	DUPLICATION CLUSTER						PRINT
	PRINTING	PLANT	OFFSET	SMALL PRINT	PRESS	PLANT	BINDERY
	BINDERY	COPIER	DUP	(OD)	OPERATOR	JOB	JOB
	MGMT	MGMT	JOB	JOB	JOB	(STG37)	(STG30)
	(STG91)	(STG66)	(STG82)	(STG37)	(STG26)		
<u>EXPRESSED JOB INTEREST</u>							
INTERESTING	63	75	100	79	33	60	
SO-SO	31	12	0	13	67	0	
DULL	6	13	0	8	0	40	
<u>PERCEIVED USE OF TALENTS</u>							
FAIRLY WELL TO PERFECT	69	92	100	38	50	40	
NONE TO VERY LITTLE	31	8	0	12	50	60	
<u>PERCEIVED USE OF TRAINING</u>							
FAIRLY WELL TO PERFECT	62	83	100	78	83	60	
NONE TO VERY LITTLE	38	17	0	22	17	40	
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>							
SATISFIED	63	75	100	80	83	40	
NEUTRAL	19	6	0	15	17	0	
DISSATISFIED	19	19	0	5	0	60	
<u>REENLISTMENT INTENTIONS</u>							
YES OR PROBABLY YES	69	62	75	80	67	60	
NO OR PROBABLY NO	25	15	0	13	33	20	
WILL RETIRE	6	23	25	7	0	20	

TABLE 21 (CONTINUED)

JOB SATISFACTION INDICATORS FOR AFSC 3R0X1 JOBS
(PERCENT MEMBERS RESPONDING)

	D.C. HIGH SP COPIER OPERATOR JOB (STG59)	PRINTING PLANT PRESS JOB (STG53)	LITHOGRAPH OPERATOR JOB (STG32)	COPIER MGMT JOB (STG23)	MICROGRAPH OPERATOR JOB (STG56)
EXPRESSED JOB INTEREST					
INTERESTING	80	83	100	56	50
SO-SO	20	17	0	11	0
DULL	0	0	0	33	50
PERCEIVED USE OF TALENTS					
FAIRLY WELL TO PERFECT	80	100	75	67	50
NONE TO VERY LITTLE	20	0	25	33	50
PERCEIVED USE OF TRAINING					
FAIRLY WELL TO PERFECT	20	100	75	44	75
NONE TO VERY LITTLE	80	0	25	56	25
SENSE OF ACCOMPLISHMENT FROM JOB					
SATISFIED	80	100	75	67	25
NEUTRAL	20	0	0	11	25
DISSATISFIED	0	0	25	22	50
REENLISTMENT INTENTIONS					
YES OR PROBABLY YES	80	83	50	67	100
NO OR PROBABLY NO	20	0	25	11	0
WILL RETIRE	0	17	25	22	0

IMPLICATIONS

As explained in the **INTRODUCTION**, this survey was conducted primarily to provide training personnel with current information on the Maintenance Scheduling career ladder for use in reviewing current training programs and training documents. The data compiled from this survey support the current structure of the AFSC 3R0X1 career ladder. The present classification structure, as described by the AFMAN 36-2108 Specialty Descriptions, accurately portrays the jobs in this study.

No serious job satisfaction problems appear to exist within this specialty. Overall, job satisfaction responses were slightly lower than those of a comparative sample of similar AF personnel surveyed in 1992; however, only minor changes were observed in responses for the current survey compared to the 1988 survey of this career ladder.

APPENDIX A

**REPRESENTATIVE TASKS PERFORMED BY
MEMBERS OF CAREER LADDER JOBS**

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TABLE A1
DUPLICATION CLUSTER
(STG16)

TASKS	PERCENT PERFORMING
E156 Place service calls	84
E140 Maintain job logs in computer using RAMS	82
I236 Load paper	80
A5 Determine or establish work priorities	80
E154 Notify customer of completed work	77
E162 Review printing or duplication requests	77
I227 Adjust copy quality displays to include document type, exposure, density, photo contrast, or special job requirements	74
I228 Adjust reduction/shift displays to include preset reduction, variable reduction, or image shift	73
I225 Add staples	73
E167 Verify duplicating or printing requests	71
E166 Track daily production	68
E139 Maintain inventories in computers using Reprographics Automated Management System (RAMS)	67
I234 Clear jams on electrostatic duplicators	66
I226 Add toners	65
E161 Process incoming or outgoing distribution	65
I232 Clean machine surfaces to include document glass or paper detector	65
E124 Distribute completed work	64
I224 Add dry ink	64
F169 Brief users on copying procedures	64
A8 Develop or establish work methods or production controls	64
A4 Determine most economical methods for reproduction	64
E138 Maintain file of work requests	63
L402 Wax drill bit ends	63
L368 Adjust stitchers	62
E123 Determine methods of reproduction	61
L401 Staple paper	61
I235 Load or unload document handler systems on electrostatic duplicators	61
C64 Analyze workload requirements	60

TABLE A2

OFFSET DUPLICATOR JOB
(STG37)

<u>TASKS</u>	<u>PERCENT PERFORMING</u>
J268 Clean blankets	100
J255 Adjust ink flow	100
J287 Regulate balance of ink and water	97
J269 Clear OD jams	95
L368 Adjust stitchers	95
J286 Regulate air or vacuum flow	95
J271 Load or unload OD delivery systems	93
J270 Dilute or mix chemicals for ODs	93
J288 Remove masters	93
J251 Adjust guides or cylinders	93
J265 Adjust pile height controls	93
I236 Load paper	90
L401 Staple paper	90
J272 Load or unload OD feeder systems	90
J256 Adjust multisheet detectors	90
J261 Adjust OD keys on ink fountain blades	90
J276 Mount blankets on blanket cylinders	90
J278 Operate automated OD blanket cleaner	88
J277 Mount masters on master cylinders	88
L371 Cut or trim paper stocks or printed materials	87
J279 Operate automated OD control panels	87
L370 Collate paper by hand	87
I234 Clear jams on electrostatic duplicators	85
J275 Monitor OD operations	85
L379 Load or unload collators	85
I227 Adjust copy quality displays to include document type, exposure, density, photo contrast, or special job requirements	85

TABLE A3
SMALL PRINTING PRESS OPERATOR JOB
(STG26)

TASKS	PERCENT PERFORMING
J268 Clean blankets	100
J255 Adjust ink flow	100
J288 Remove masters	100
J277 Mount masters on master cylinders	100
J276 Mount blankets on blanket cylinders	100
J287 Regulate balance of ink and water	83
J251 Adjust guides or cylinders	83
J256 Adjust multisheet detectors	83
I236 Load paper	67
J286 Regulate air or vacuum flow	67
J265 Adjust pile height controls	67
J269 Clear OD jams	67
J278 Operate automated OD blanket cleaner	50
J271 Load or unload OD delivery systems	50
J272 Load or unload OD feeder systems	50
J279 Operate automated OD control panels	50
J275 Monitor OD operations	50
I234 Clear jams on electrostatic duplicators	50
J266 Adjust pressure between blanket cylinders and impression cylinders	50
J262 Adjust OD registration position	50

TABLE A4
PRINTING PLANT BINDERY JOB
(STG30)

TASKS	PERCENT PERFORMING
L370 Collate paper by hand	100
L401 Staple paper	100
L371 Cut or trim paper stocks or printed materials	100
L402 Wax drill bit ends	100
L397 Select wire	100
L394 Remove or replace cutting blades	80
L395 Remove or replace cutting sticks	80
L388 Perform operator maintenance on bindery equipment	80
L383 Marry sections manually	80
L379 Load or unload collators	80
L368 Adjust stitchers	80
L373 Inspect bindery equipment	80
L363 Adjust drill back gauges	80
L375 Install drill bits or spindles	80
L396 Remove or replace stitcher parts	80
L372 Fold paper by hand	80
L399 Sharpen drill bits	80

TABLE A5
DUPLICATION CENTER H.S. COPIER OPERATOR JOB
(STG59)

TASKS	PERCENT PERFORMING
I236 Load paper	100
I227 Adjust copy quality displays to include document type, exposure, density, photo contrast, or special job requirements	100
I224 Add dry ink	100
I228 Adjust reduction/shift displays to include preset reduction, variable reduction, or image shift	100
I235 Load or unload document handler systems on electrostatic duplicators	80
I234 Clear jams on electrostatic duplicators	80
E154 Notify customer of completed work	80
I226 Add toners	80
E167 Verify duplicating or printing requests	60
E140 Maintain job logs in computer using RAMS	60
I250 Unload or sort originals from electrostatic duplicators	60
I232 Clean machine surfaces to include document glass or paper detector	60
I225 Add staples	60
L371 Cut or trim paper stocks or printed materials	60
I230 Clean document handler belts, bezels, rolls, sensors, or mirrors	60
L368 Adjust stitchers	60

TABLE A6
PRINTING PLANT PRESS JOB
(STG53)

TASKS	PERCENT PERFORMING
K326 Adjust PP registration position	100
K329 Attach plates to plate cylinders	100
K325 Adjust PP keys on ink fountain blades	100
K331 Cover dampening rollers	100
K330 Attach PP blankets to blanket cylinders	100
K354 Replenish ink fountains	100
K358 Set ink or water controls	100
K322 Adjust plate cylinder head or tail clamps	100
K355 Replenish water fountains	100
K340 Pack blankets	100
K335 Load or unload feeder systems on PP	83
K334 Load or unload delivery systems on PP	83
K327 Adjust PP water fountain stops	83
K323 Adjust PP feeder mechanisms	83
K328 Adjust water rollers	83
J256 Adjust multisheet detectors	83
J262 Adjust OD registration position	83
J265 Adjust pile height controls	83
J269 Clear OD jams	83
J255 Adjust ink flow	83
J251 Adjust guides or cylinders	83
J268 Clean blankets	83
J286 Regulate air or vacuum flow	83
J274 Moisten duplicating dampening rollers	83

TABLE A7
LITHOGRAPH OPERATOR JOB
(STG32)

TASKS	PERCENT PERFORMING
M420 Load or unload copyboards	100
E133 Inspect negatives	100
M425 Process film in automatic film processors or dryers	100
M424 Prepare negatives or positives to job specifications	100
M421 Monitor temperature in automatic film processors or dryers	100
M408 Attach screens to film vacuum backs	100
M433 Set camera exposure times	100
M423 Prepare developers or chemicals	100
M432 Set camera apertures	100
M422 Perform operator maintenance on cameras or camera equipment	100
M431 Select magenta or grey contact halftone screens	100
M411 Compute amounts of image enlargements or reductions, other than for electrostatic platemaking	100
M407 Adjust vacuum on camera backs	100
M416 Drain automatic film processors	100
M410 Clean sinks or trays	100
M414 Cut film to size	100
M404 Adjust copyboards	100
M403 Adjust camera lights	100
M405 Adjust lensboards	100
C67 Edit completed work for compliance with work requests	75
M430 Select film types	75
M417 Fabricate contact negatives or positives	75
M415 Determine job specifications for preparing negatives or positives	75
E166 Track daily production	75
B37 Counsel personnel on personal or military-related matters	75
C87 Evaluate work schedules	75
M419 Inspect test strips visually	75
N439 File negatives	75
E137 Maintain equipment or supply inventories	75
C92 Write EPRs	75
M427 Process test strips through automatic film processors	75

TABLE A8
COPIER MANAGEMENT JOB
(STG23)

TASKS	PERCENT PERFORMING
A24 Plan copier programs	100
B45 Implement copier programs	100
A13 Establish copier programs	89
F180 Monitor usage of copiers assigned to other units	89
F175 Evaluate copier use	78
F174 Evaluate copier justification	78
C74 Evaluate copier programs	67
F183 Review copier logs	67
F176 Maintain records of copier monitors	67
F173 Establish controls for copier use	67
E126 Initiate AF Forms 9 (Request for Purchase)	67
F170 Conduct orientation classes for copier monitors	56
F169 Brief users on copying procedures	56
F178 Make entries on AF Forms 893 (Consolidated Copier Inventory Cost and Production Report)	56
A11 Draft budget or financial requirements	56

TABLE A9
MICROGRAPH OPERATOR JOB
(STG56)

TASKS	PERCENT PERFORMING
O457 Inspect completed micrographic work	100
O458 Load or unload micrographic duplicators	100
O454 Cut microfiche	100
O459 Load or unload processors	100
O455 Develop exposed film	100
O465 Program computer output microform (COM) jobs	75
O461 Package microfiche	75
O456 Fill and adjust chemical replenishment systems	75
O470 Select micrographic cameras	75
O479 Test film resolution with microscopes	75
O478 Test film density with densitometers	75
O463 Perform operator maintenance on micrographic equipment	75

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APPENDIX B

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These Task Modules (TMs) were developed in order to organize and summarize the extensive task information of this specialty. The TMs were developed by clustering tasks which are coperformed by the same incumbents. Coperformance is a measure of how probable a task will be performed with another task, based upon the responses of surveyed personnel. For example, if an individual performs one RAMS task, the probability is very high that he or she will perform other RAMS tasks. Thus, the group of RAMS tasks can be considered a "natural group" of associated or related tasks (see TM 0001 below). The statistical clustering generally approximates these "natural groupings."

The title of each TM is a best estimate as to the generic subject content of the group of tasks. The TMs are useful for organizing the task data into meaningful units and as a way to concisely summarize the extensive job data. However, TMs are only one way to organize the information. Other strategies may also be valid.

Listing of Module Statements

- 0001 ST0295 PRODUCTION TRACKING (RAMS)
- 0002 ST0229 CUSTOMER SERVICE
- 0003 ST0201 WORKCENTER MANAGEMENT
- 0004 ST0219 BINDERY DRILL DUTIES
- 0005 ST0196 COPIER/DUPPLICATOR MAINTENANCE
- 0006 ST0156 SUPPLY DUTIES
- 0007 ST0064 BINDERY OPERATORS
- 0008 ST0063 COPIER/DUPPLICATOR TROUBLE SHOOTING
- 0009 ST0132 OFFSET DUPLICATOR MAINTENANCE
- 0010 ST0118 ELECTROSTATIC MASTER IMAGER MAINTENANCE
- 0011 ST0077 OFFSET DUPLICATOR TROUBLE SHOOTING
- 0012 ST0098 EMI TROUBLE SHOOTING
- 0013 ST0055 BASE COPIER USE PROGRAM DUTIES
- 0014 ST0179 PRODUCTION CONTROL
- 0015 ST0218 DUPLICATING CENTER MANAGEMENT
- 0016 ST0216 ADMINISTRATIVE CORRESPONDENCE
- 0017 ST0047 SENIOR LEVEL MANAGEMENT DUTIES
- 0018 ST0174 INSPECTION DUTIES
- 0019 ST0185 PERSONNEL MANAGEMENT
- 0020 ST0149 ASSIGNMENT & PLANNING ACTIVITIES
- 0021 ST0124 FINANCIAL MANAGEMENT
- 0022 ST0223 COMMERCIAL PRINTING ACTIVITIES
- 0023 ST0104 UNIT PREPAREDNESS DUTIES
- 0024 ST0073 TRAINING PROGRAM ACTIVITIES
- 0025 ST0080 DUPLICATING CENTER FORMS
- 0026 ST0085 SUPPLY
- 0027 ST0041 QUALITY ASSURANCE
- 0028 ST0106 WORKCENTER EVALUATION
- 0029 ST0136 CIVILIAN PERSONNEL MANAGEMENT
- 0030 ST0037 CONTRACT PRINTING DUTIES
- 0031 ST0019 BINDERY EQUIPMENT MAINTENANCE
- 0032 ST0240 LITHOGRAPHIC PLATE DUTIES
- 0033 ST0285 NEGATIVES & FLATS

- 0034 ST0397 COAT PREPARATION
 - 0035 ST0261 QUALITY ASSURANCE OF NEGATIVES
 - 0036 ST0011 PRINTING PLANT OPERATIONS
 - 0037 ST0222 LAYOUT/STRIPPING DUTIES
 - 0038 ST0245 LITHOGRAPHIC CAMERA DUTIES
 - 0039 ST0171 LARGE PRINTING PRESS MAINTENANCE
 - 0040 ST0114 LARGE PRINTING PRESS TROUBLE SHOOTING
 - 0041 ST0030 TRAINING
 - 0042 ST0067 MICROGRAPHIC ACTIVITIES
 - 0043 Tasks not referenced
-

0001 ST0295 PRODUCTION TRACKING (RAMS)

- 1 E139 Maintain inventories in computers using Reprographics Automated Management System (RAMS)
 - 2 E140 Maintain job logs in computer using RAMS
 - 3 E166 Track daily production
 - 4 E167 Verify duplicating or printing requests
-

0002 ST0229 CUSTOMER SERVICE

- 1 E124 Distribute completed work
 - 2 E138 Maintain file of work requests
 - 3 E154 Notify customer of completed work
 - 4 E156 Place service calls
 - 5 E161 Process incoming or outgoing distribution
 - 6 E162 Review printing or duplication requests
-

0003 ST0201 WORKCENTER MANAGEMENT

- 1 A3 Calculate value of equipment
- 2 A4 Determine most economical methods for reproduction
- 3 A5 Determine or establish work priorities
- 4 A6 Determine requirements for space, equipment, personnel, or supplies
- 5 A18 Establish performance standards for subordinates
- 6 A21 Establish stock levels
- 7 A28 Plan or schedule work assignments
- 8 B37 Counsel personnel on personal or military-related matters
- 9 B39 Direct maintenance of administrative files
- 10 B40 Direct maintenance or utilization of equipment
- 11 B41 Direct quality control programs
- 12 B43 Direct workcenter activities

0003 ST0201 WORKCENTER MANAGEMENT (CONTINUED)

- 13 B53 Interpret policies, directives, or procedures for subordinates
 - 14 B61 Supervise Reprographics Specialists (AFSC 70350)
 - 15 C81 Evaluate personnel for compliance with performance standards
 - 16 C92 Write FPRs
 - 17 E123 Determine methods of reproduction
-

0004 ST0219 BINDERY DRILL DUTIES

- 1 L363 Adjust drill back gauges
 - 2 L365 Adjust drill side gauges
 - 3 L368 Adjust stitchers
 - 4 L370 Collate paper by hand
 - 5 L371 Cut or trim paper stocks or printed materials
 - 6 L375 Install drill bits or spindles
 - 7 L383 Marry sections manually
 - 8 L401 Staple paper
 - 9 L402 Wax drill bit ends
-

0005 ST0196 COPIER/DUPLICATOR MAINTENANCE

- 1 I224 Add dry ink
- 2 I225 Add staples
- 3 I226 Add toners
- 4 I227 Adjust copy quality displays to include document type, exposure, density, photo contrast, or exposure, density, photo contrast, or special job requirements
- 5 I228 Adjust reduction/shift displays to include preset reduction, variable reduction, or image shift
- 6 I230 Clean document handler belts, bezels, rolls, sensors, or mirrors
- 7 I232 Clean machine surfaces to include document glass or paper detector
- 8 I234 Clear jams on electrostatic duplicators
- 9 I235 Load or unload document handler systems on electrostatic duplicators
- 10 I236 Load paper
- 11 I237 Monitor electrostatic duplicator operations
- 12 I239 Perform exception programming
- 13 I245 Replace dry ink reclaim container
- 14 I250 Unload or sort originals from electrostatic duplicators

0006 ST0156 SUPPLY DUTIES

- 1 E126 Initiate AF Forms 9 (Request for Purchase)
 - 2 E134 Inventory equipment, tools, or supplies
 - 3 E137 Maintain equipment or supply inventories
 - 4 E155 Pick up supplies
-

0007 ST0064 BINDERY OPERATORS

- 1 L366 Adjust folder mechanisms
 - 2 L367 Adjust jogger stapler settings
 - 3 L372 Fold paper by hand
 - 4 L373 Inspect bindery equipment
 - 5 L374 Inspect cutters
 - 6 L377 Label, address, or mail materials
 - 7 L379 Load or unload collators
 - 8 L380 Load or unload folding machines
 - 9 L384 Monitor collators
 - 10 L385 Monitor folding machines
 - 11 L387 Pack or wrap printed materials manually
 - 12 L388 Perform operator maintenance on bindery equipment
 - 13 L389 Perform quality control on bindery operations to include inspecting sequencing of pages
 - 14 L390 Position stitcher tables
 - 15 L391 Program operating controls on bindery equipment
 - 16 L392 Punch holes in paper using manual punchers
 - 17 L394 Remove or replace cutting blades
 - 18 L395 Remove or replace cutting sticks
 - 19 L396 Remove or replace stitcher parts
 - 20 L397 Select wire
 - 21 L399 Sharpen drill bits
-

0008 ST0063 COPIER/DUPLICATOR TROUBLE SHOOTING

- 1 I229 Change developers
- 2 I231 Clean electronic control center screens
- 3 I233 Clean or change cortrons
- 4 I238 Perform diagnostic or optional programming
- 5 I240 Perform operator maintenance on electrostatic duplicators
- 6 I241 Remove or replace belts on electrostatic duplicators
- 7 I242 Remove or replace filters on electrostatic duplicators
- 8 I243 Remove or replace minor hardware, such as nuts, bolts, or screws, on electrostatic duplicators
- 9 I244 Remove or replace stapler heads

0008 ST0063 COPIER/DUPPLICATOR TROUBLE SHOOTING (CONTINUED)

- 10 I246 Replace photo receptors
 - 11 I247 Set receiving trays on electrostatic duplicators
 - 12 I249 Troubleshoot electrostatic duplicators
-

0009 ST0132 OFFSET DUPLICATOR MAINTENANCE

- 1 J251 Adjust guides or cylinders
- 2 J252 Adjust impression cylinder grippers
- 3 J253 Adjust impression cylinders
- 4 J254 Adjust impression levers
- 5 J255 Adjust ink flow
- 6 J256 Adjust multisheet detectors
- 7 J258 Adjust OD feeder mechanisms
- 8 J259 Adjust OD images
- 9 J260 Adjust OD ink rollers
- 10 J261 Adjust OD keys on ink fountain blades
- 11 J262 Adjust OD registration position
- 12 J263 Adjust OD water fountain stops
- 13 J264 Adjust paper buckles
- 14 J265 Adjust pile height controls
- 15 J266 Adjust pressure between blanket cylinders and impression cylinders
- 16 J267 Adjust pressure between master cylinders and blanket cylinders
- 17 J268 Clean blankets
- 18 J269 Clear OD jams
- 19 J270 Dilute or mix chemicals for ODs
- 20 J271 Load or unload OD delivery systems
- 21 J272 Load or unload OD feeder systems
- 22 J274 Moisten duplicating dampening rollers
- 23 J275 Monitor OD operations
- 24 J276 Mount blankets on blanket cylinders
- 25 J277 Mount masters on master cylinders
- 26 J278 Operate automated OD blanket cleaner
- 27 J279 Operate automated OD control panels
- 28 J280 Operate automated OD master converter
- 29 J281 Operate automated OD master ejector
- 30 J282 Operate automated OD master inserter
- 31 J283 Perform operator maintenance on ODs
- 32 J284 Prepare OD blankets for mounting
- 33 J285 Prepare OD plates for mounting
- 34 J286 Regulate air or vacuum flow
- 35 J287 Regulate balance of ink and water
- 36 J288 Remove masters

0009 ST0132 OFFSET DUPLICATOR MAINTENANCE (CONTINUED)

- 37 J292 Remove or replace minor hardware, such as nuts, bolts, or screws, on ODs
 - 38 J302 Remove or replace OD ink rollers
 - 39 J310 Set receiving tray joggers on ODs
 - 40 J312 Sort originals from ODs
-

0010 ST0118 ELECTROSTATIC MASTER IMAGER MAINTENANCE

- 1 G186 Adjust electrostatic master imager (EMI) toner feeds
 - 2 G187 Adjust EMI deliveries
 - 3 G188 Adjust EMI exposure time
 - 4 G189 Adjust EMI feeders
 - 5 G192 Adjust EMI master feed height
 - 6 G193 Adjust position of images on electrostatic masters
 - 7 G194 Balance toners or developers
 - 8 G195 Compute amounts of image enlargements or reductions for electrostatic platemaking
 - 9 G196 Correct electrostatic masters
 - 10 G197 Develop electrostatic plates
 - 11 G198 Fuse plates
 - 12 G199 Inspect electrostatic plates
 - 13 G200 Monitor humidity in EMIs
 - 14 G201 Perform operator maintenance on electrostatic platemaking equipment
 - 15 G202 Prepare offset plates using EMIs
 - 16 G206 Trim duplicating masters
-

0011 ST0077 OFFSET DUPLICATOR TROUBLE SHOOTING

- 1 J257 Adjust OD backlash gears
- 2 J273 Measure paper humidity for ODs
- 3 J289 Remove or replace front guides
- 4 J290 Remove or replace impression cylinder grippers
- 5 J291 Remove or replace master cylinder plate clamps
- 6 J294 Remove or replace multisheet detectors
- 7 J295 Remove or replace OD air hoses
- 8 J296 Remove or replace OD belts
- 9 J297 Remove or replace OD conveyer tapes
- 10 J298 Remove or replace OD dampening rollers
- 11 J299 Remove or replace OD delivery systems
- 12 J300 Remove or replace OD filters
- 13 J301 Remove or replace OD gripper fingers
- 14 J303 Remove or replace OD separator fingers
- 15 J304 Remove or replace solenoids

0011 ST0077 OFFSET DUPLICATOR TROUBLE SHOOTING (CONTINUED)

- 16 J305 Remove or replace springs
 - 17 J306 Remove or replace vacuum hoses
 - 18 J307 Remove preservatives from OD plates
 - 19 J308 Repair blanket low spots
 - 20 J309 Select inks for ODs
 - 21 J311 Set timing between feeding units and duplicating heads
-

0012 ST0098 EMI TROUBLE SHOOTING

- 1 G190 Adjust EMI fuse lamps
 - 2 G191 Adjust EMI impression leveling levers
 - 3 G203 Remove or replace EMI biases
 - 4 G204 Remove or replace EMI coronas
 - 5 G205 Select EMI apertures
-

0013 ST0055 BASE COPIER USE PROGRAM DUTIES

- 1 A13 Establish copier programs
- 2 A24 Plan copier programs
- 3 B45 Implement copier programs
- 4 C74 Evaluate copier programs
- 5 F168 Analyze production reports
- 6 F169 Brief users on copying procedures
- 7 F170 Conduct orientation classes for copier monitors
- 8 F171 Conduct orientation classes for copier users
- 9 F172 Conduct quality assurance evaluations
- 10 F173 Establish controls for copier use
- 11 F174 Evaluate copier justification
- 12 F175 Evaluate copier use
- 13 F176 Maintain records of copier monitors
- 14 F177 Make entries on AF Forms 884 (Copier Production Log)
- 15 F178 Make entries on AF Forms 893 (Consolidated Copier Inventory Cost and Production Report)
- 16 F179 Make entries on AF Forms 936 (Copier Cost and Production Report)
- 17 F180 Monitor usage of copiers assigned to other units
- 18 F181 Prepare supply cost standards
- 19 F182 Prepare supply inventories
- 20 F183 Review copier logs
- 21 F184 Validate AF Forms 893
- 22 F185 Verify supply inventories

0014 ST0179 PRODUCTION CONTROL

- 1 A8 Develop or establish work methods or production controls
 - 2 A10 Develop standards for printed materials
 - 3 A20 Establish production standards
 - 4 C64 Analyze workload requirements
 - 5 C65 Calculate rates of production
-

0015 ST0218 DUPLICATING CENTER MANAGEMENT

- 1 A14 Establish duplicating center operations
 - 2 A25 Plan duplicating center operations
 - 3 B47 Implement duplicating center operations
-

0016 ST0216 ADMINISTRATIVE CORRESPONDENCE

- 1 A17 Establish organizational policies, such as operating instructions (OIs), or standard operating procedures (SOPs)
 - 2 A34 Write recommendations for awards or decorations
 - 3 B35 Brief supervisory personnel on inspection findings
 - 4 B36 Conduct staff meetings
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0017 ST0047 SENIOR LEVEL MANAGEMENT DUTIES

- 1 B60 Supervise military personnel with AFSCs other than 703X0
 - 2 B63 Supervise Reprographics Technicians (AFSC 70370)
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0018 ST0174 INSPECTION DUTIES

- 1 C78 Evaluate job descriptions
- 2 C79 Evaluate maintenance or use of workspace, equipment, or supplies
- 3 C84 Evaluate procedures for storage, inventory, or inspection of property items

0019 ST0185 PERSONNEL MANAGEMENT

- 1 A30 Plan safety programs or security
 - 2 A32 Schedule personnel for leaves, passes, or temporary duty (TDY)
 - 3 A33 Write job descriptions
 - 4 B50 Implement safety or security programs
 - 5 C82 Evaluate personnel for promotion, demotion, reclassification, or special awards
 - 6 C85 Evaluate safety or security programs
-

0020 ST0149 ASSIGNMENT & PLANNING ACTIVITIES

- 1 A1 Assign personnel to duty positions
 - 2 A2 Assign sponsors for newly assigned personnel
 - 3 A26 Plan layout of facilities
 - 4 D95 Assign on-the-job training (OJT) trainers
-

0021 ST0124 FINANCIAL MANAGEMENT

- 1 A11 Draft budget or financial requirements
 - 2 B46 Implement cost-reduction programs
 - 3 C72 Evaluate budget requirements
 - 4 E122 Compute cost-production data
 - 5 E129 Initiate or complete cost reports, such as DD Forms 250 (Material Inspection and Receiving Report)
 - 6 E147 Make entries on AF Forms 826 (Installation Reproduction/Equipment Inventory Report)
 - 7 E159 Prepare production cost statistics
-

0022 ST0223 COMMERCIAL PRINTING ACTIVITIES

- 1 A12 Establish commercial printing procurement programs
- 2 B44 Implement commercial printing procurement programs
- 3 B52 Initiate personnel action requests
- 4 E150 Make entries on JCP Forms 2 (Commercial Printing Report)
- 5 E165 Track commercial printing job progress

0023 ST0104 UNIT PREPAREDNESS DUTIES

- 1 A22 Plan briefings
 - 2 B38 Direct development or maintenance of status indicators, such as boards, graphs, or charts
 - 3 B54 Maintain contingency plans
 - 4 B56 Maintain status indicators, such as boards, graphs, or charts
 - 5 D99 Conduct training conferences or briefings
-

0024 ST0073 TRAINING PROGRAM ACTIVITIES

- 1 D100 Counsel trainees on training progress
 - 2 D101 Determine training requirements, such as OJT or resident course training
 - 3 D105 Develop specialty training standards (STS)
 - 4 D106 Direct or implement training programs
 - 5 D107 Establish or maintain study reference files
 - 6 D108 Establish training standards
 - 7 D109 Evaluate OJT trainees
 - 8 D111 Evaluate training methods, techniques, or programs
 - 9 D113 Maintain training records, charts, graphs, or files
 - 10 D114 Plan or schedule OJT
 - 11 D115 Prepare job qualification standards (JQSs)
 - 12 D116 Prepare training schedules
 - 13 D118 Select or schedule individuals for specialized training
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0025 ST0080 DUPLICATING CENTER FORMS

- 1 E127 Initiate or complete AF Forms 616 (Fund Cite Authorization (FCA))
 - 2 E128 Initiate or complete AF Forms 820 (Printing Procurement Data Register)
 - 3 E143 Make entries on AF Forms 337 (Consol Dup Cen and Fclty Rprt of Jobs Produced Which Exceed JCP Dup Limitations)
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0026 ST0085 SUPPLY

- 1 E136 Issue or log turn-ins of equipment, tools, or supplies
- 2 E144 Make entries on AF Forms 601 (Equipment Action Request)

0027 ST0041 QUALITY ASSURANCE

- 1 B57 Schedule equipment maintenance
 - 2 C67 Edit completed work for compliance with work requests
 - 3 C70 Edit press proofs for reproducible quality
 - 4 C71 Edit pressplates for reproducible quality
 - 5 E125 Examine proofsheets
 - 6 E142 Maintain processed job logs
 - 7 E148 Make entries on equipment maintenance records
 - 8 E160 Prepare production reports
 - 9 E163 Safeguard classified materials
-

0028 ST0106 WORKCENTER EVALUATION

- 1 C76 Evaluate equipment before purchase or rental
 - 2 C77 Evaluate inspection reports
 - 3 C87 Evaluate work schedules
 - 4 C88 Indorse civilian performance ratings or supervisory appraisals
 - 5 C89 Indorse enlisted performance reports (EPRs)
 - 6 C90 Investigate accidents or incidents
 - 7 C93 Write staff studies, surveys, or special reports
 - 8 D96 Brief unit staff personnel on training programs or matters
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0029 ST0136 CIVILIAN PERSONNEL MANAGEMENT

- 1 B59 Supervise civilians
 - 2 C91 Write civilian performance ratings or supervisory appraisals
-

0030 ST0037 CONTRACT PRINTING DUTIES

- 1 A16 Establish micrographic facility operations
- 2 A31 Prepare requests for bids
- 3 E130 Initiate or complete GPO Forms 2511 (Print Order)
- 4 E131 Initiate or complete SF Forms 1 (Printing and Binding Requisition to the Public Printer)
- 5 E157 Prepare contract job orders
- 6 E158 Prepare contractual documents
- 7 E164 Select sources for commercial printing

0031 ST0019 BINDERY EQUIPMENT MAINTENANCE

- 1 I248 Set up electronic auditrons
- 2 L362 Adjust cutter clutches or brakes
- 3 L364 Adjust drill corner rounding knives
- 4 L376 Install folder perforating, scoring, or slitting attachments
- 5 L378 Load gatherers
- 6 L381 Load or unload gatherers
- 7 L382 Load spools
- 8 L386 Pack or wrap printed materials by machine
- 9 L393 Remove or replace bindery equipment drive belts
- 10 L398 Set up components for sorter operation
- 11 L400 Square up back gauges and adjust tapes

0032 ST0240 LITHOGRAPHIC PLATE DUTIES

- 1 H208 Apply preservatives to lithographic plates after development
- 2 H209 Compute lithographic platemaker exposure times
- 3 H210 Correct defects on lithographic plates
- 4 H211 Develop lithographic plates
- 5 H212 Inspect lithographic plates
- 6 H214 Prepare lithographic plates using multiple exposure method
- 7 H215 Prepare lithographic plates using single exposure method
- 8 N445 Prepare layout dummies

0033 ST0285 NEGATIVES & FLATS

- 1 H207 Adjust vacuum for flat-to-plate contacts
- 2 H213 Perform operator maintenance on lithographic platemaking equipment
- 3 H216 Prepare lithographic plates using step and repeat methods
- 4 H223 Punch lithographic plates for registration
- 5 N435 Assemble flats
- 6 N436 Correct imperfections in negatives
- 7 N437 Cut masking sheets
- 8 N438 Cut windows in flats
- 9 N439 File negatives
- 10 N440 Label flats
- 11 N441 Mask unwanted areas of negatives or positives
- 12 N442 Perform operator maintenance on layout equipment
- 13 N443 Position and tape negatives on layout sheets
- 14 N444 Position tick and trim marks
- 15 N447 Punch flats for registration

0033 ST0285 NEGATIVES & FLATS (CONTINUED)

- 16 N449 Scribe negatives
- 17 N451 Store flats
- 18 N452 Strip inserts

0034 ST0397 COAT PREPARATION

- 1 H218 Prepare scribe coats using whirl-on method
- 2 H219 Prepare scribe coats using wipe-on method
- 3 H221 Prepare water coats using whirl-on method
- 4 H222 Prepare water coats using wipe-on method

0035 ST0261 QUALITY ASSURANCE OF NEGATIVES

- 1 C68 Edit halftone negatives for size, density, or fit
- 2 E133 Inspect negatives

0036 ST0011 PRINTING PLANT OPERATIONS

- 1 A29 Plan printing plant operations
- 2 B49 Implement printing plant operations
- 3 B62 Supervise Reprographics Superintendents (AFSC 70390)
- 4 C66 Edit charts for registration or color
- 5 E132 Initiate or complete SF Forms 1C (Printing and Binding Requisition for Specialty Items)
- 6 E149 Make entries on JCP Forms 1 (Printing Plant Report)
- 7 E151 Make entries on JCP Forms 4 (Annual Map and/or Chart Plant Report)
- 8 E152 Make entries on JCP Forms 6 (Annual Inventory of Stored Machinery and Equipment)

0037 ST0222 LAYOUT/STRIPPING DUTIES

- 1 N446 Prepare negatives or positives for shipping
- 2 N448 Rule masking paper
- 3 N450 Select and attach screens
- 4 N453 Tab film for complex registrations

0038 ST0245 LITHOGRAPHIC CAMERA DUTIES

- 1 M403 Adjust camera lights
- 2 M404 Adjust copyboards
- 3 M405 Adjust lensboards
- 4 M407 Adjust vacuum on camera backs
- 5 M408 Attach screens to film vacuum backs
- 6 M409 Center images on ground glass
- 7 M410 Clean sinks or trays
- 8 M411 Compute amounts of image enlargements or reductions, other than for electrostatic platemaking
- 9 M412 Compute copyboard settings
- 10 M413 Compute lens settings
- 11 M414 Cut film to size
- 12 M415 Determine job specifications for preparing negatives or positives
- 13 M416 Drain automatic film processors
- 14 M417 Fabricate contact negatives or positives
- 15 M419 Inspect test strips visually
- 16 M420 Load or unload copyboards
- 17 M421 Monitor temperature in automatic film processors or dryers
- 18 M422 Perform operator maintenance on cameras or camera equipment
- 19 M423 Prepare developers or chemicals
- 20 M424 Prepare negatives or positives to job specifications
- 21 M425 Process film in automatic film processors or dryers
- 22 M427 Process test strips through automatic film processors
- 23 M430 Select film types
- 24 M431 Select magenta or grey contact halftone screens
- 25 M432 Set camera apertures
- 26 M433 Set camera exposure times

0039 ST0171 LARGE PRINTING PRESS MAINTENANCE

- 1 K313 Add powder to spray attachments
- 2 K315 Adjust delivery mechanisms
- 3 K316 Adjust feeder timing
- 4 K317 Adjust gripper fingers
- 5 K318 Adjust head stops
- 6 K319 Adjust impression cylinder pressure
- 7 K320 Adjust or time corrugating bars
- 8 K321 Adjust paper calipers
- 9 K322 Adjust plate cylinder head or tail clamps
- 10 K323 Adjust PP feeder mechanisms
- 11 K324 Adjust PP ink rollers
- 12 K325 Adjust PP keys on ink fountain blades

0039 ST0171 LARGE PRINTING PRESS MAINTENANCE (CONTINUED)

- 13 K326 Adjust PP registration position
 - 14 K327 Adjust PP water fountain stops
 - 15 K328 Adjust water rollers
 - 16 K329 Attach plates to plate cylinders
 - 17 K330 Attach PP blankets to blanket cylinders
 - 18 K331 Cover dampening rollers
 - 19 K332 Dilute or mix chemicals for PPs
 - 20 K333 Inspect printing presses for worn or malfunctioning parts
 - 21 K334 Load or unload delivery systems on PP
 - 22 K335 Load or unload feeder systems on PP
 - 23 K339 Monitor PP operations
 - 24 K340 Pack blankets
 - 25 K341 Pack plates
 - 26 K342 Perform operator maintenance on PPs
 - 27 K343 Prepare PP blankets for mounting
 - 28 K344 Prepare PP plates for mounting
 - 29 K345 Prepare PP plates for storage
 - 30 K346 Remove or replace dampening rollers
 - 31 K350 Remove or replace PP ink rollers
 - 32 K352 Remove or replace side guides
 - 33 K354 Replenish ink fountains
 - 34 K355 Replenish water fountains
 - 35 K356 Select PP inks
 - 36 K357 Set bearer pressures
 - 37 K358 Set ink or water controls
 - 38 K359 Store plates
 - 39 K360 Test fountain solution pH
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0040 ST0114 LARGE PRINTING PRESS TROUBLE SHOOTING

- 1 C83 Evaluate printing plant operations
- 2 K314 Adjust backlash gears on large printing presses (PPs)
- 3 K336 Measure paper humidity for PPs
- 4 K337 Measure room humidity
- 5 K347 Remove or replace PP air hoses
- 6 K348 Remove or replace PP conveyer tapes
- 7 K349 Remove or replace PP gripper fingers
- 8 K351 Remove or replace PP separator fingers
- 9 K353 Remove PP preservatives from plates

0041 ST0030 TRAINING

- 1 D94 Administer or score tests
 - 2 D98 Conduct resident course classroom training
 - 3 D102 Develop course curricula
 - 4 D103 Develop lesson plans
 - 5 D104 Develop resident course or career development course (CDC) curriculum materials
 - 6 D110 Evaluate progress of resident course students
 - 7 D112 Maintain training equipment
 - 8 D117 Procure training aids, space, or equipment
 - 9 D119 Write test questions
 - 10 D120 Write training reports
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0042 ST0067 MICROGRAPHIC ACTIVITIES

- 1 A27 Plan micrographic facility operations
 - 2 B48 Implement micrographic facility operations
 - 3 C80 Evaluate micrographic facility operations
 - 4 O454 Cut microfiche
 - 5 O455 Develop exposed film
 - 6 O456 Fill and adjust chemical replenishment systems
 - 7 O457 Inspect completed micrographic work
 - 8 O458 Load or unload micrographic duplicators
 - 9 O459 Load or unload processors
 - 10 O461 Package microfiche
 - 11 O463 Perform operator maintenance on micrographic equipment
 - 12 O465 Program computer output microform (COM) jobs
 - 13 O470 Select micrographic cameras
 - 14 O473 Set film encodings
 - 15 O474 Set film speeds
 - 16 O478 Test film density with densitometers
 - 17 O479 Test film resolution with microscopes
 - 18 O480 Title film jackets
-

0043 Tasks not referenced

- 1 A7 Develop inputs to mobility, disaster preparedness, unit emergency, or alert plans
- 2 A9 Develop organizational charts
- 3 A15 Establish job order cost accounting procedures
- 4 A19 Establish priorities for restoring equipment to operational status
- 5 A23 Plan commercial printing procurement programs
- 6 B42 Direct utilization of equipment

0043 Tasks not referenced (CONTINUED)

- 7 B51 Implement suggestion programs
- 8 B55 Maintain publication libraries
- 9 B58 Supervise apprentice reprographics specialists (AFSC 70330)
- 10 C69 Edit manuscripts for size or quality
- 11 C73 Evaluate commercial printing procurement programs
- 12 C75 Evaluate duplicating center operations
- 13 C86 Evaluate suggestions
- 14 D97 Conduct OJT
- 15 E121 Burn or shred classified materials
- 16 E135 Inventory classified materials
- 17 E141 Maintain job logs, other than using RAMS
- 18 E145 Make entries on AF Forms 725 (Requisition for Microform Production Services)
- 19 E146 Make entries on AF Forms 730 (Monthly Production Record)
- 20 E153 Monitor savings of scrap materials
- 21 H217 Prepare scribe coats using presensitized method
- 22 H220 Prepare striprites or peel coats
- 23 J293 Remove or replace molleton covers
- 24 K338 Mix inks
- 25 L361 Adjust cutter clamp pressures
- 26 L369 Break down cutter back gauges
- 27 M406 Adjust upper or lower turnarounds in film processors
- 28 M418 Inspect test strips on densitometers
- 29 M426 Process film manually
- 30 M428 Remove or replace lights on cameras
- 31 M429 Select and attach lens filters
- 32 M434 Set processing sink temperature controls
- 33 O460 Mount aperture cards
- 34 O462 Perform methane blue tests, such as hypo
- 35 O464 Process and examine control strips
- 36 O466 Select COM program cards
- 37 O467 Select film encodings, such as blip or frame numbering
- 38 O468 Select film modes, such as comic or cine
- 39 O469 Select indexings
- 40 O471 Select photographic sequences
- 41 O472 Select reduction ratios
- 42 O475 Set lighting intensity
- 43 O476 Set reduction ratios
- 44 O477 Set temperature controls

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